

# **China's Soaring Financial, Industrial and Technological Power**

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# China's Soaring Financial, Industrial and Technological Power

By Charles W. McMillion  
*Executive Summary*

Writing about China's soaring economy today is like trying to drink from a fire hydrant. As I am finishing this report today, September 28th, China announced that its state-owned coal producer, Shenhua Energy, just raised 66.58 billion yuan (\$8.9 billion) from its Shanghai initial public offering, the largest domestic offering yet, after receiving a world record \$356 billion in subscription offers. China's Shanghai and Shenzhen exchanges thus raised over \$20 billion in IPOs in September alone. Also reported today is that China's giant, closely state-aligned telecom equipment manufacturer Huawei and a US private equity group are acquiring the giant US 3Com just in time for next year's rush to the pre-Olympics build-out of third generation mobile capacity for China's own, proprietary TD-SCDMA telecom standard. Tomorrow is another day.

But in recent years, as the US and much of the rest of the world focused on wars, fears of terrorism, and various emotional social issues, China transformed itself into an economic powerhouse. While the US and the other G-7 countries emphasized privatization and deregulation, China restructured and consolidated its state-owned enterprises into some of the most admired and advanced companies in the world and developed comprehensive and remarkably aggressive Five-Year industrial policy plans to continue its stunning progress. As a measure of its size and modernization efforts, research and development in China has displaced that in Japan, and is on a rapid pace that could surpass that in the US within five years. Particularly since 2003, China's economic and trade performance has been unprecedented.

Widely considered to be a financial basket case just six years ago, China has retained near total state control over its financial system while reducing its banks' bad debt ratios down to international standards, becoming the world's leading market for IPOs and second leading venture capital market. China's leading bank recently surpassed Citigroup as the most highly capitalized bank in the world, its leading insurance company is among the world leaders, and China has many other financial institutions that are not far behind. With soaring Current Account surpluses that exceeded 9% of China's GDP last year -- and may reach 14% in 2007 -- China's war chest of foreign currency rocketed from \$212 billion in 2001 to a record-shattering \$1.4 Trillion now, rising (net) by \$10 billion per week thus far in 2007 and with no end in sight.

This remarkably rapid accumulation of wealth has occurred alongside accelerating double-digit GDP growth with soaring advances in each component of GDP: consumer spending, business investment, net exports and massive increases in government spending of its flood of new revenues on modern infrastructure, military and other urban and rural programs. China has become the third largest auto producer and will likely be the largest by 2009. TNCs report soaring modern production, sales in China and exports in virtually every industry. China's productivity growth has been identified as the fastest in the world helping drive prices *down* in most manufacturing industries and helping keep inflation in China rising less than in the US despite growth that is many times faster. China's prices did spike in mid-2007 due to higher food prices but the core producer price index was up only 0.9% yr/yr to June. Profits are booming for state-owned financial and commercial enterprises, their TNC minority partners and others.

Unfortunately, China's remarkable gains are coming largely from production and capital displaced from elsewhere, most particularly from the US, and it is now urgently threatening even the very TNCs that are profiting from production in China. The US will accumulate -\$1.3 Trillion in Current Account deficits with China from 2001 to 2007 -- virtually the entire amount of China's foreign currency war chest. US annual deficit in goods and services trade with China soared from -\$81 billion in 2001 to likely reach -\$275 billion in 2007. But US Current Account losses are even worse than for goods and services alone because interest bills are now coming due for past borrowing. In 2001, the US already paid -\$6 billion more to China to service debts and other investments than all US TNCs and other US interests earned in China. In 2006 this net payment soared to -\$27 billion and it appears to be soaring to over -\$42 billion in 2007.

As China has modernized and built its own strong and dynamic clusters of industry supply chains, the composition of China's trade -- recently characterized as "process trade" -- changed dramatically. Globally, although not with the US, low quality Textiles and Apparel accounted for more than all of China's manufacturing trade surplus as late as 2003. But as China's global manufacturing surplus rocketed from \$47 billion in 2003 to perhaps over \$400 billion in 2007, the surplus shifted and is now concentrated in machinery and electronics.

In the computer industry, for example, the ratio of China's computers/parts exports to imports surged from 2.4-to-1 in 2000 to 4.7-to-1 in 2006 and 2007. That is, for each \$1 that China pays to import computers and parts, it earns \$4.70 in exports -- even with its own domestic computer market growing at over 20% per year. China now dominates global information technology production -- parts as well as assembly -- with a 2007 global trade surplus of about \$70 billion for computers and about \$60 billion for mobile phones. Because of skyrocketing deficits for information technologies with China, the US has now suffered a combined global deficit in advanced technology goods **and** services trade since 2004. The technology deficit with China is nine times worse than with Japan.

But China is also rapidly developing modern supply chain clusters in other key industries such as aerospace and automotive and developing their own global brands and technical standards to allow their large state-owned firms to prosper independently from their current, TNC partners. For a generation, TNCs in industries from financial services to aerospace, automotive, petrochemicals and others have taken minority stakes in large, Chinese state-owned enterprises confident that their vastly superior expertise would dominate the venture while they gained local experience and political approval for independent ventures. Most report they are now earning solid profits on their Chinese operations but virtually none has a successful independent venture and all are faced with deep-pocketed, quite sophisticated, state-owned partners that are now rapidly developing their own, competing independent brands.

This is the most significant finding in the report. The interests of TNCs and their "home" country have long diverged. The US has for two decades lost high-wage jobs and been forced to borrow staggering sums of money to sustain its standard of living because of production displaced by large, sustained trade deficits. But many TNCs prospered by playing one country off another. Now China has created a global market environment in which TNCs believe they cannot afford NOT to produce and sell in China. This gives China's authorities the ability to play the world's most powerful TNCs off one-another in demands for state-of-the-art product and process technologies, R&D, executive training and more.

There are some who deny even this, but it is now commonplace to suggest that China's economic prowess could threaten the US in 20 years. Yet the experience of the past five years makes it clear that China is a huge threat now and could be dominant in five more years.



# China's Soaring Financial, Industrial and Technological Power<sup>1</sup>

Charles W. McMillion

## Accelerating Financial and Commercial Leverage:

In mid-2007 China's state-controlled Industrial and Commercial Bank surpassed Citigroup to become the world's most highly capitalized bank. ICBC's profits soared 61%, to \$5.4 billion, in the first half of 2007. This was only slightly faster than the 56% average of China's four major state-controlled banks with combined net profits of \$19.4 billion for the first six months of 2007.<sup>2</sup> One year ago ICBC raised a world record \$19 billion in its initial public offering of equity shares just after the Bank of China raised \$11.2 billion in its first IPO in Hong Kong (the 4th largest on record) and drew an astonishing \$84.6 billion in bids for \$2.5 billion in Yuan IPO shares on the Shanghai market. These and 138 other IPOs pushed "greater" China past the US for the most funds raised in 2006 and, with a long backlog of offerings, China with Hong Kong may top the IPO market in 2007 and for years to come.<sup>3</sup>

China Life Insurance Company, the country's dominant, state-controlled life insurer with 47% market share -- and rising -- reported net profits surged 160% to \$3.1 billion in the first half of this year. Listed on the New York and Hong Kong exchanges since late 2003, China Life's third successful listing in Shanghai early this year had already sent its capitalization to near that of world leaders American International Group and Berkshire Hathaway. China's entire insurance industry saw profits rise to \$18.1 billion 2007-H1 with industry assets growing by 20% to \$334 billion. As with the banking sector, despite confident predictions six years ago that large, sophisticated insurance trans-nationals would quickly dominate the state-controlled China market, foreign property and casualty insurers have only 1.2% of the market -- and falling.<sup>4</sup>

But venture capitalists are flooding into China which is now the world's second largest VC market. A recent study of China's market found "investors are not jumping at unknown risks in an emerging market. Of the 55 deals in information services, 50 were in the advanced stages of development, according to the report. More than 40 companies had developed full product offerings, and eight companies were already turning a profit."<sup>5</sup>

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<sup>1</sup> This report is an update to my report "China's Very Rapid Economic, Industrial and Technological Emergence," to the US-China Security Review Commission in 2002 and is available on the Commission's web site. This report begins where the earlier report left off.

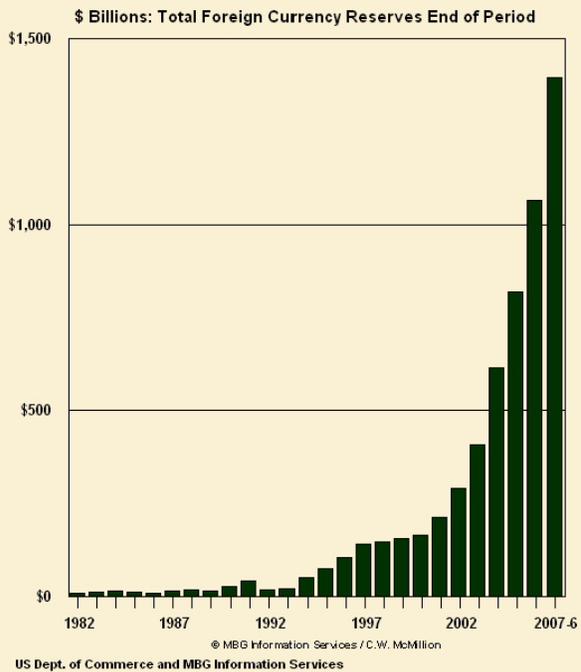
<sup>2</sup> "ICBC tops Citigroup as world's biggest," *Reuters*, July 23, 2007. It must be noted that Citigroup had annual global earnings of \$90 billion compared with ICBC's \$24 billion. See also Jason Leon, "ICBC, Bank of China Report Surging First-Half Profits," *The Wall Street Journal*, August 23, 2007 and other financial market reports.

<sup>3</sup> "Bank of China draws \$84.6bn of bids in IPO," *Gulf Times*, July 1, 2006. 140 IPOs in China raised a record \$62 billion in 2006 compared with \$48 billion raised in the US. China counts transactions undertaken in Hong Kong, Shanghai, Shenzhen and Taiwan. "China raises \$62 bln in IPO funds to beat US," *Shanghai Daily*, March 29, 2007.

<sup>4</sup> James T. Arredy, "China Life Has Strong Shanghai Debut," *The Wall Street Journal*, 1-9-2007. Jamil Anderline, "Insurance invasion that never was," *The Financial Times*, 8-14-2007 and Insurers report 160 pct rise in first-half investment earnings," *China Daily*, 7-25-2007.

<sup>5</sup> Sabine Muscat, "Venture funding pours into China during 2nd quarter," *San Francisco Chroni-*

**China's Foreign Currency Reserves:  
Soared by Over \$1 Trillion Since Admitted to WTO**



As part of what Ben Bernanke -- now Chairman of the Federal Reserve -- calls a "global savings glut," China's foreign currency "war chest" reserves rocketed to a world record \$1.07 Trillion at the end of 2006 and soared by more than \$10 billion per week, reaching \$1.33 Trillion by midyear 2007.<sup>6</sup> In a remarkable reversal of fortunes, the Bank of China has now established a sovereign fund, the China Investment Corporation (ICI,) to make substantial, strategic loans and investments abroad. Elaborating on these changes, *China Daily's* senior editor notes: "... capital no longer poses a bottleneck for (China's) economic growth. The key issue at present is how to shift from the effort for attraction of investment to stress on the selection of investment, the investment quality, the optimization of investment mix and the solicitation of investment mode..."<sup>7</sup>

Although ignorance and denial of stunning successes in China remain widespread within some prominent, ideological circles, the choices of those responsible

for actual commercial decisions reveal a sharply different reality. Indeed, China's "scientific" financial and industrial policies are so successful, and US policy either absent or missteps so severe, that much of today's reality was unimaginable just six years ago. As Senator Hillary Clinton recently lamented in commenting on record US current account deficits and the need for massive, constant borrowing from China; "...how do you get tough on your banker?"<sup>8</sup>

China's success quickly built on itself, giving China's authorities sharply increased abilities to demand the transfer and local development of key global technologies. This power is now an urgent and severe threat to US living standards, to the world economy and even to many of the trans-national firms that currently profit from low cost production and sales in China. Rather than TNCs playing individual countries off one another as is common elsewhere, China's leaders

*cle*, August 15, 2007.  
<sup>6</sup> Ben S. Bernanke, "The Global Saving Glut and the US Current Account Deficit," the Sandridge Lecture, Virginia Association of Economics, Richmond, Virginia, 3-10-2005; available on the Federal Reserve's Website. Data on China's currency reserves and much of the other data not directly referenced in this report are from the *International Financial Statistics* of the International Monetary Fund, various issues. China's bank savings doubled between 2001-2005.  
<sup>7</sup> Gong Wen, "China should strive to be 'global office of outsourcing,'" *China Daily*, 1-25-2007.  
<sup>8</sup> Transcript, Sen. Clinton Addresses Democrats, *The Washington Post*, February 5, 2007. Indeed, with Congress considering trade sanctions, China recently sent an unmistakable reminder that China has the financial muscle to inflict major economic damage on the US if the status quo is not continued. "No Plans' To Sell Off Greenback," *China Daily*, August 13, 2007.

now skillfully and patiently play the world's leading TNCs against one another as China builds its financial power and modern capacity to produce innovative goods and services increasingly now with its own global firms and brands.

Although generally outside the scope of this report on China's relative strengths, it must also be noted that much of today's US reality was unimaginable six years ago. Negotiations to admit China to membership in the World Trade Organization were concluded on September 17, 2001, less than one week after the September 11th attacks on the World Trade Center and the Pentagon diverted US policy attention away from the vital financial and commercial issues discussed in this report.

Other key events at this time: On July 4, 2001 the dismantled remains of a US Navy EP-3 surveillance was delivered to Hickman Air Force Base in Hawaii after being downed and held for four months by China's military in a tense and very public face-off on Hainan Island. The US spy plane's crew was embarrassingly held and interrogated by China's military for 11 days and the plane's advanced electronics were removed.

Days later, on July 13, 2001, the International Olympic Committee awarded the 2008 Olympic Games to Beijing which promised to use the event as a global coming-out party and high tech showcase.

Six years ago there were dire warnings in prominent quarters -- including within China -- that China's state-controlled banking system was insolvent, its financial system at grave risk. A Rand Corporation study contained especially dire warnings of imminent collapse. Similarly, there were prominent forecasts, including from the then-Chairman of the Federal Reserve, that the US was on the verge of paying off its federal government debt so quickly that major tax cuts were urgently needed.<sup>9</sup>

Today, only the Agricultural Bank of China, which reported a 65% rise in profits in the first half of 2007, to \$5.6 billion, continues to face significant restructuring problems. China's financial system has now worked off or sold to major global financial institutions most of the non performing loans that threatening its financial system just a few years ago. Indeed, today it is China's soaring equity prices and profits of listed firms, and a savings glut that raise concern along with exposure to the questionable quality of the highly leveraged US debt markets.<sup>10</sup>

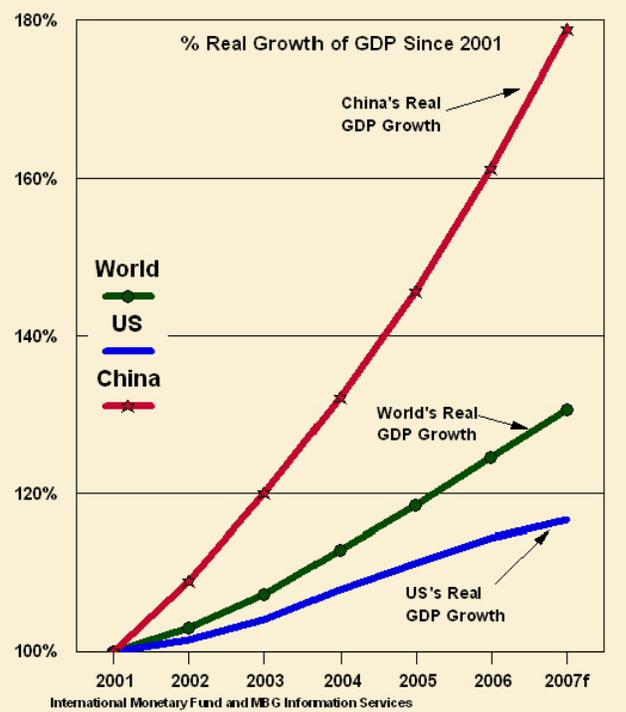
China Development Bank is one of China's three policy banks primarily involved in massive funding of infrastructure projects and basic industries with an emphasis on politically sensitive western regions and old industrial areas of the northeast. CDB reported that 32.6% of its loans were non-performing in 1998 but with a portfolio that has quadrupled in value to \$280 billion, CDB now has kept its NPL ratio below 2% for 57 consecutive months and recently reported NPL of just 0.68%. China's 17 leading commercial banks now report a combined NPL

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<sup>9</sup> Charles Wolf, Jr.; K. C. Yeh; Benjamin Zycher; Nicholas Eberstadt; Sung-Ho Lee, Fault Lines in China's Economic Terrain particularly Chapter 7, (Santa Monica, CA; Rand Corporation, 2003.) See also Keith Bradsher, "New Challenge for China's Shaky Banks," *The New York Times*, September 17, 2007. Alan Greenspan, "Testimony of Chairman Alan Greenspan: Outlook for the federal budget and implications for fiscal policy Before the Committee on the Budget, US Senate," January 25, 2001

<sup>10</sup>Richard McGregor, "Bad debt makes ABC a Chinese puzzle," *Financial Times*, June 20, 2007. David Barboza, "China to Revamp 4th Bank in Preparation for Offering" *New York Times*, January 25, 2007. China's media have reported extensively on the problems and the cleanup. *Bloomberg News*, "Bank of China Reports Heavy Exposure to Subprime Crisis," 8-24, 2007.

**Economic Growth During Last 6 Years**  
**US Growth Half the World Pace, China 3 Times As Fast**



of 7.2% -- well within international standards.<sup>11</sup> Restructuring of China's financial system is widely seen as hugely successful; bank profits and share prices are soaring.<sup>12</sup>

During this period the US Federal debt soared from \$5.1 Trillion to \$9.0 Trillion and household debts skyrocketed from \$7.4 Trillion to \$13.5 Trillion. For the first time since the early 1930s, current savings in the US fell below 1% of disposable income. The Comptroller General of the United States now tours the country warning that the US is on the path of fiscal destruction followed by Roman empire with debts set to exceed \$46 Trillion within 25 years.

Clearly, over the past six years China's financial fortunes have improved enormously while US conditions are now of worldwide concern.

One key reason for China's remarkable financial success is its economic growth. The Rand Corporation and others expected China's economic growth to slow

after 2000 to an annual rate of 5% with major risks of an even more abrupt slowdown. Even now, MIT's Lester Thurow claims that China's authorities report 70% of economic activity is in rural areas which he says is stagnant so overall GDP growth is merely half the reported rate.<sup>13</sup>

In fact, China's authorities report only 18% of economic activity occurs in the Western provinces and that their GDP doubled from 2000 to 2005 with massive infrastructure spending and industry growth.<sup>14</sup> Indeed, there is overwhelming evidence to support China's reported GDP soaring by 79% since 2001, accelerated each year, to 11.1% in 2006 and 11.5% yr/yr to 2007Q2. The US, on the other hand, despite enormous fiscal stimulus from tax cuts and spending increases, grew less than 17% over the period and only 1.9% yr/yr to 2007Q2.

<sup>11</sup>"NPL ratio of China's major commercial banks at 7.02 % in Q1," *China Daily*, May 17, 2007.

"CDB's non-performing loan ratio drops to 0.68 pct," *China Daily*, July 23, 2007.

<sup>12</sup>See, for example, the speech by Howard Davies, director of the London School of Economics and former deputy governor of the Bank of England, "China's Financial Reform Successful," *China Daily*, July 6, 2007. "China's 5 largest banks," *The Wall Street Journal*, August 2, 2007.

<sup>13</sup> Anil Bamezai, Charles Wolf Jr., K. C. Yeh, Benjamin Zycher, Asian Economic Trends and Their Security Implications, (Santa Monica, Rand; 2000) pp. 34-42. Current forecasts by Rand and others still focus on China's real and potential problems. See "China Downside Scenarios," Office of Net Assessment, US DOD, July-August, 2006. Lester Thurow, "A Chinese Century? Maybe It's the Next One," *The New York Times*, August 19, 2007. Others have claimed China understate GDP. See Richard McGregor, "China to restate GDP," *Financial Times*, 12-13-2005.

<sup>14</sup>"One trillion yuan spent on western infrastructure," *China Daily*, September 6, 2006.

Rand Corporation forecasts have been especially dismissive of China's prospects for sustained productivity growth. Yet the Conference Board reports China led the world again in 2006 with 9.5% productivity growth as US productivity grew by only 1.5%. Indeed, China's productivity has soared by 9.0% per year since 2000, more than triple the annual 2.8% US rate.<sup>15</sup> Strong productivity growth let China enjoy double-digit GDP growth while keeping consumer price increases to just 1.5% in 2006 and just 1.3% over the past six years. This compares with US consumer price increases of 3.2% in 2006 and an average of 2.7% since 2001. That is, China's stunning productivity growth allows for GDP growth that is three times the US rate with half the inflation. Even as food prices surged in 2007, core consumer prices were up just 0.9% yr/yr.

China's rapid economic growth, strong productivity growth and low inflation other than for pork and other foods in early

2007, is joined by a global current account surplus that rocketed from \$17.4 billion (1.3% of GDP) in 2001 to \$249.7 billion (9.4% of GDP) in 2006. China's 2007 current account surplus is on track to reach over \$400 billion, 14% of GDP, with its soaring income on foreign investments and transfers now adding to surging surpluses for traded goods and services.

During this period, with GDP growth barely one-half of the world growth rate, US current account deficits worsened rapidly, from -\$384.7 billion (-3.8% of GDP) in 2001 to -\$811.5 billion (-6.2% of GDP) in 2006. With US growth slowing further, and a weakening currency, it appears that the 2007 current account deficit may improve slightly. Yet, over the six years ending in 2007, China will accumulate global current account surpluses of about \$1 Trillion while the US will accumulate global deficits of almost -\$4 Trillion.

Stanford University's Nobel laureate Michael Spence wrote -- and the Wall Street Journal published -- a column in January 2007 claiming that China's current account deficit "...is well under 5% of GDP, smaller in percentage terms than the US trade deficit."<sup>16</sup> This has not been the case since 2004.

For a generation, China's soaring ability to attract TNC investment has been a powerful contrast with Japan's sudden rise and fall but also a strong argument against forecasts of China's imminent collapse. Actual TNC investment in China since they were first welcome in 1978 now



<sup>15</sup> "US Labor Productivity Growth in 2006 was the Lowest in More than a Decade," Conference Board Press Release of January 23, 2007 and their previous annual productivity reports. Also "China's economic growth potential underestimated," *Chinaview.com*, February 9, 2007.

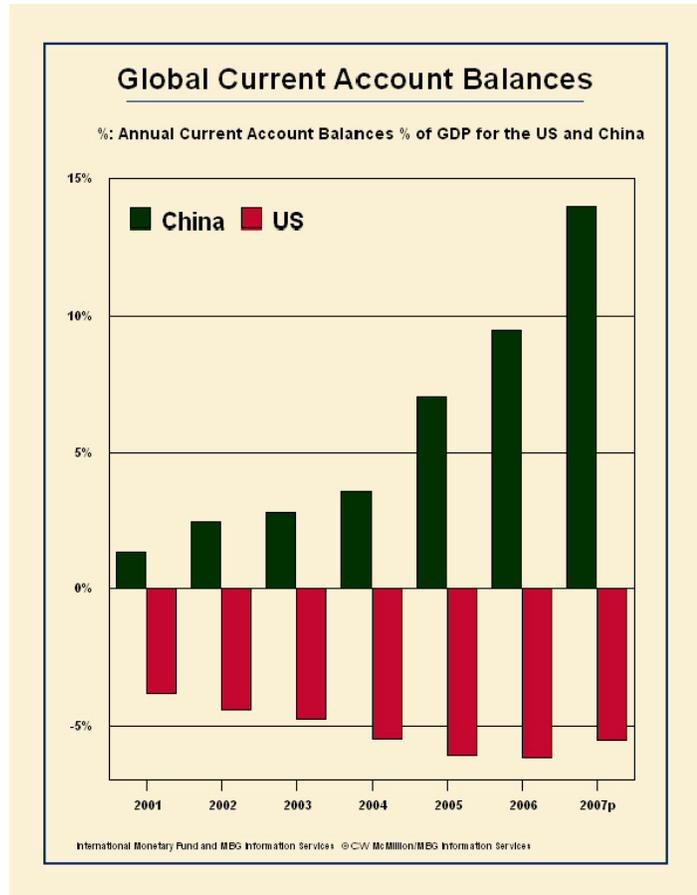
<sup>16</sup> Michael Spence, "We are all in it together," *The Wall Street Journal*, January 5, 2007. The *WSJ* was informed of this error but refused to print a correction, a letter to the editor or a responding column to set the record straight.

total over \$750 billion and include over 610,000 foreign-funded enterprises.<sup>17</sup> Indeed, excluding merger and acquisition activities that merely change ownership of existing global assets within developed countries, China has been the leading recipient of foreign direct investment since 1999. For example, the US received \$161.5 billion in FDI in 2006 but 92% was for M&A with only \$13.7 billion to establish new businesses while China received \$69.5 billion in FDI with at least \$40 billion going to the establishment of new enterprises. China added 41,485 foreign-invested firms in 2006 -- 114 each day.<sup>18</sup>

This flood of FDI into China has exposed wide differences between interests of TNCs and their “home” country. TNCs incorporated in Delaware, for example, move production, jobs, technologies, other expertise and tax revenues to China without regard to wider US interests. As the unanimous and bipartisan “Cox Commission” of the US House documented in 1998, even regarding basic national security issues with China, “Corporations may often face inherent conflicts of interest in complying with US export laws.”<sup>19</sup> These diverging interests can be far stronger in areas where the law is silent.

China has developed and increased its appeal for the world’s leading global firms for a wide range of reasons. Certainly China offers an enormous supply of disciplined, very low-wage labor that has helped major TNCs create -- and demand -- “the China price” for traded goods worldwide. One recent study for the US Department of Labor finds comparable compensation costs for manufacturing sector workers in China’s urban areas were just 3% of US costs (and 25% of Mexico’s costs) in 2002. Wages in China’s non-urban areas are far lower still.<sup>20</sup>

Wages in urban regions of China have risen rapidly in recent years, accompanied by soaring growth in productivity that appears to have prevented any significant narrowing in the



<sup>17</sup> “Cumulative FDI in China exceeds \$750 bln,” *China Daily*, August 28, 2007.

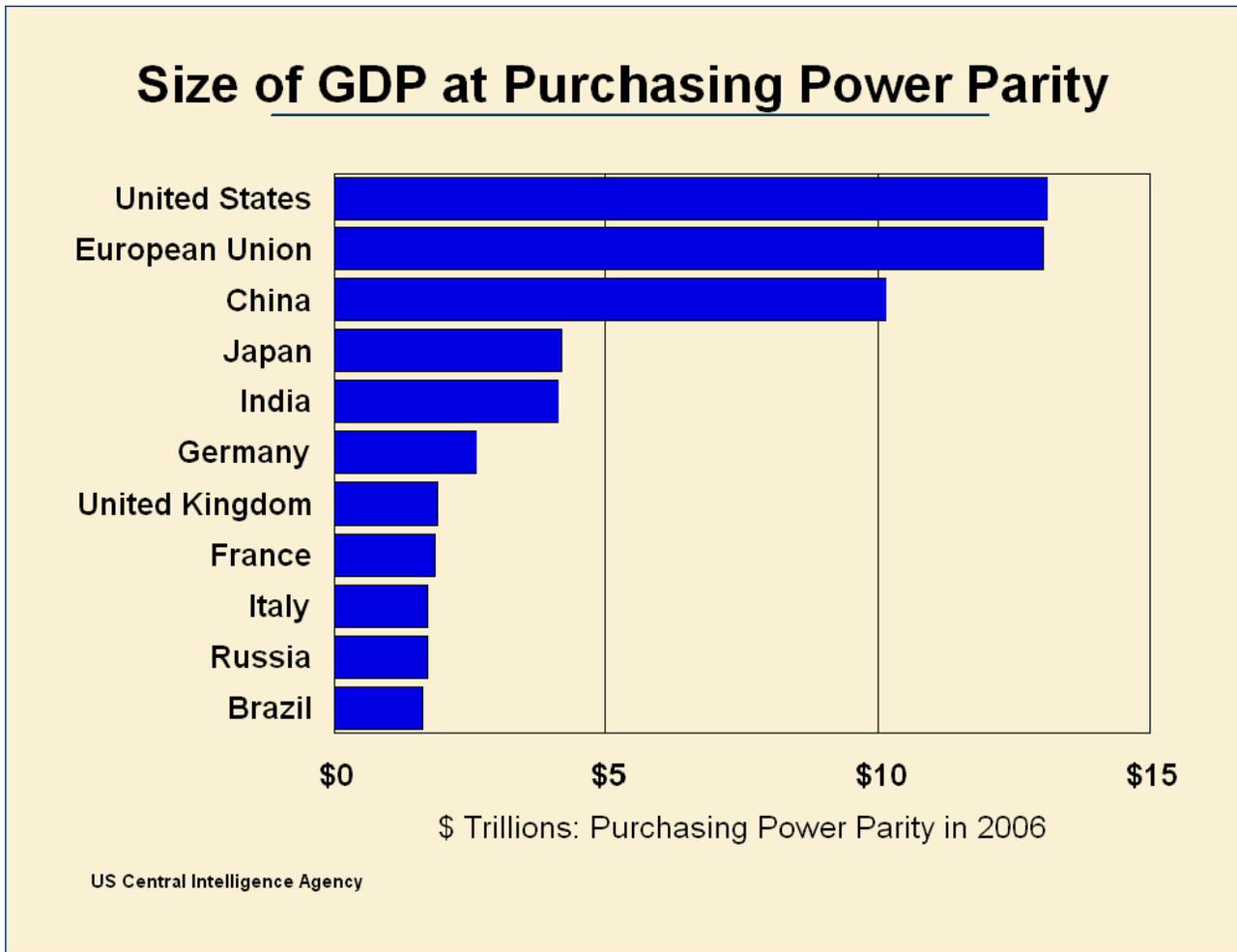
<sup>18</sup> FDI data for the US are in “Foreign Direct Investment in the US,” *Survey of Current Business* of the US Department of Commerce, June 2007. For China’s FDI data and increasing attention to M&A policy see “Govt to guide flow of capital,” *China Daily*, February 27, 2007.

<sup>19</sup> US House of Representatives Report of the Select Committee on US National Security and Military/Commercial Concerns With the People’s Republic of China, (Washington, DC: USGPO, January 1999. Overview section, page XXVIII. The Chairman of the Select Committee, Representative Christopher Cox, is now Chairman of the Securities and Exchange Commission.

<sup>20</sup> Judith Banister, “Manufacturing Employment and Compensation in China,” report to the US Department of Labor, BLS, November 2005. p. 83.

labor cost advantage. Despite constant claims to the contrary in US media, unemployment and underemployment remains one of the key challenges facing China today particularly among the university educated and those displaced by farm mechanization.<sup>21</sup> Specific skills shortages are always a problem in a dynamic economy but here, too, China is tackling their skills problems in massive, pragmatic education and training programs. Particularly impressive is China's large, well-financed program to recruit talent worldwide.<sup>22</sup>

But firms are also drawn to China by the size and uniquely rapid growth of the market and the scale economies this provides them and their competitors. Boeing and Airbus, for example, forecast China will need 3400 new commercial jets over the next 20 years at a cost of more than \$340 billion.<sup>23</sup> China's reported GDP is only 20% of the US' size at today's exchange



<sup>21</sup> Tian Chengping, Minister of Labor and Social Security, recently noted that with 24 million new job seekers in urban areas during 2007, the hope is to provide 12 million jobs -- including the replacement of those that die or retire. "China still faces tough employment task," *China Daily*, March 13, 2007.

<sup>22</sup> Ministry of Personnel, "Flexible measures to attract overseas talented people," *China Daily*, January 7, 2007. To improve quality, the rapid growth of Chinese universities from 1999-2006 has slowed with a new emphasis on partnering with leading universities in the US and elsewhere. Per capita annual incomes soared by 9% and 5%, respectively, from 2001 to 2005.

<sup>23</sup> "China needs 3,400 planes over 20 years Boeing says" *China Daily*, September 18, 2007.

rates and ranks behind Japan and Germany as only the world's fourth largest economy. But as the Central Intelligence Agency notes, by actual units of output -- purchasing power parity -- China's GDP is already 2 1/2 times the size of Japan, 78% of the US economy and growing much faster than any other major economy.<sup>24</sup>

China's semiconductor market rocketed from virtual insignificance a decade ago to become the world's largest in 2005 and its growth continues to dwarf that in the US and elsewhere in the world.<sup>25</sup> China is, by far, the world's largest producer of telephones with near 900 million telephone lines including over 600 million mobile phone customers, adding more than 45 million new lines per year, particularly now in the Western region<sup>26</sup>. China's auto production and sales have quadrupled in the past six years, are soaring by 22% again in 2007 and is now the world's third largest producer and second largest vehicle market behind only the stagnant US. Executives at General Motors note that China is already its second largest market and its fastest growing.<sup>27</sup> China quickly has become the world's largest producer and consumer of cement, many metals, coal, industrial chemicals and much more driven partly by unprecedented, large infrastructure projects for roads, rail, air and sea ports, water transport and treatment, the rapid build-out of power and telecommunications grids and more.

Jeff Immelt, CEO of General Electric, told a group including current UK Prime Minister Gordon Brown, "We are basically an infrastructure company, so we have massive opportunities in energy, to sell aircraft engines and health care products, and in financial services and the like. (China and India) will literally spend hundreds of billions of dollars on products that we sell over the next few years."<sup>28</sup>

Six years ago few TNCs reported profits from operations in China. However, according to China's Commerce Ministry and the US-China Business Council, because of China's remarkably strong growth, Chinese businesses with US investment totaled \$80 billion in 2006 sales with combined profits of \$10 billion. 73% of such firms reported profits in 2006 with 60% indicating an increase in profits while 37% claimed profits in China are higher than their global average.<sup>29</sup>

That is, as commercial and financial TNC executives often explain, NOT to be in China is NOT an option. This fact of commercial and financial life has become increasingly compelling over the past six years, adding to economic leverage available to China's leaders in negotiations with all TNCs.

Unlike in Japan, China's policies have drawn virtually all the world's leading technology firms to collaborate on R&D as well as production in China, opening pipelines into the global technological, financial, training, design, marketing and managerial capabilities of the world's leading enterprises. China's stunning progress and new leverage now threatens the core interests of these TNCs, if not necessarily the interests of executives who may find their next employment with a new Chinese competitor.<sup>30</sup>

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<sup>24</sup> Central Intelligence Agency, The World Factbook Online. Last updated June 2007.

<sup>25</sup> Xianmin Xi, "IC China: 2007," International Market Insight Report of the US Foreign Commercial Service, Beijing, August 20, 2007.

<sup>26</sup> "China's mobile subscribers exceed 500 mln," *China Daily*, July 24, 2007.

<sup>27</sup> "China's car exports rise in 1st quarter of 2007," *China Daily*, May 10, 2007. "GM sales in China to hit one million vehicles" August 9, 2007.

<sup>28</sup> "GE sees China, India sales in hundreds of \$blns," *Reuters*, February 4, 2005.

<sup>29</sup> "US companies obtain good return from investment in China," *China Daily*, August 24, 2007.

<sup>30</sup> Highlighting the need for better accountability to shareholders and to home country interests,

The *China Daily* of November 20, 2006 provides a useful example of developments in the years since China was admitted to membership in the WTO: "Global nuclear giant Westinghouse said it is offering an all-round technology transfer in its bid for China's third-generation nuclear power generation units... 'We will fully cooperate with our customers to transfer all technology as requested,'" said Stephen R. Tritch, president and chief executive officer (CEO) of Westinghouse Electric Company.

Westinghouse' major competitor for contracts estimated to reach \$8 billion was a consortium led by French-owned Areva which also promised to fully transfer its competing technology to win the contract. As the *China Daily* explained: "Winning the bid for the four nuclear reactors is considered vital for the two companies, as the Chinese Government said it will adopt a unified, standardized design for the third-generation nuclear reactors across its nuclear industry." Winning the contract threatens to create powerful Chinese state-owned competitors. But the losing technology could be shut out of any access to China's projected \$50 billion nuclear construction market over the next 14 years, possibly suffering a devastating blow in financial markets and in other product markets as well.

Westinghouse was awarded the contract in December 2006 with the *China Daily* explaining: "Sources said the country chose Westinghouse based on its technology, its agreement on transferring expertise, the style of cooperation and the prospects for developing locally-based technology... Westinghouse, and China's State Nuclear Power Technology Co. also signed a companion agreement on specific terms for the technology transfer."<sup>31</sup>

Weeks later, with Westinghouse' technology transfer and other negotiations still ongoing, China's Nuclear Society announced that Areva, too, would be awarded an additional \$5 billion contract to build two nuclear reactors using -- and transferring -- their competing next generation technology. Thus, the two leading third-generation nuclear reactor technologies are both being transferred to Chinese state-controlled groups with China's government also having leverage to play both current and future developments in each technology off the other.

This competition between the world's leading technology firms to win the right to transfer vital, core technology and ongoing R&D to China has accelerated rapidly. As the *Wall Street Journal* explains in a page one story: "To be considered in the bidding for equipment contracts totaling several billion dollars, General Electric and its competitors were required to form joint ventures with the state-owned Chinese power companies. GE was also required to transfer to their new partners technology and advanced manufacturing guidelines for its '9F' turbine, which GE had spent more than a half billion dollars to develop."<sup>32</sup>

many executives of TNCs in China leave their firm to pursue their own interests in China and/or to join Chinese competitors. John Thornton, then-President and Co-COO of Goldman Sachs, left in 2003 to pursue his own interests in China. Of course, IBM executives transferred to Lenovo when acquired and several top Dell executives have also moved to Lenovo and other local competitors. Dell's former CEO, Kevin Rollins, joined Lenovo's key private equity investor. TNC executives that facilitate ventures in China receive enormous and immediate personal compensation for activities that may or may not prove to the long-term benefit of their firm or client. See Ed Frauenheim, "For CEOs, offshoring pays," *CNET News*, August 31, 2004.

<sup>31</sup>"World nuclear giants bid for contract with China," November 20, 2006 and "Nuke Deal," December 18, 2006 articles in the *China Daily Online*. Westinghouse became a subsidiary of Toshiba in 2006. The Areva announcement is "China Makes Deal for Two Nuclear Plants," *Reuters*, February 14, 2006.

<sup>32</sup>"China's Price for Market Entry: Give Us Your Technology, Too -- GE Shares Generator Plans

Following the investigations of the Select Committee of the US House in 1998, the US Department of Commerce first identified in 1999 that, along with the acquisition and development of key technologies, China's preferred offset demand from global firms was the establishment of joint R&D centers in China.<sup>33</sup> From only 124 foreign-funded R&D centers in 2001, there are now over 1000 centers -- an eight-fold increase in six years -- involving virtually every leading global technology firm. Most centers are carefully targeted and are now integrated with the global firms' worldwide capabilities.

In 2002 the web site for GE Corporate R&D featured the Director of its new Shanghai center, Dr. Xiangli Chen, who explained, "There are several factors that make us unique: we are multi-disciplined and we are integrated with the global R&D team. What does that mean? You might be a physicist in China who works closely with a structural engineer in Bangalore, India or Niskayuna (New York,) USA. Our curiosity and fascination with technology draws us together, and we are driven to push its boundaries." This global integration is now standard practice.<sup>34</sup> China's new emphasis on spurring its own pragmatic innovation beyond that provided by the R&D of TNCs in China is the logical next step that is only now becoming possible.

China's 11th Five-year Development Plan (2006-2010) focuses squarely on owning key technologies -- not just gaining access through TNC joint-ventures -- controlling technical standards and developing their own Chinese brands. China is also phasing out its 30-year-old preferential tax treatment of foreign-invested operations in China -- unless deemed to provide needed technology -- raising taxes from 15% to 25% on foreign-based firms and lowering taxes from as high as 33% to 25% on domestic firms. These policies would not be possible without the past unprecedented success and remarkable current negotiating strength of China's authorities.<sup>35</sup>

China's ability to acquire and develop key technologies is the result of China's unique market power but also of an extraordinary effort that remains best examined by the 1998 Cox Commission despite the Commission's limited focus primarily on illegal acquisition of military technologies. Most of the methods identified apply equally well to commercial technologies. The PRC uses a variety of approaches to acquire military technology. These include:

- *Relying on "princelings" who exploit their military, commercial, and political connections with high-ranking CCP and PLA leaders to buy military technology from abroad.*
- *Illegally transferring US military technology from third countries.*
- *Applying pressure on US commercial companies to transfer licensable technology illegally in joint ventures.*
- *Exploiting dual-use products and services for military advantage in unforeseen ways.*
- *Illegally diverting licensable dual-use technology to military purposes.*
- *Using front companies to illegally acquire technology.*

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To Win \$900 Million Deal; Gray Area in WTO Rules Kathryn Kranhold, *The Wall Street Journal*, February 26, 2004.

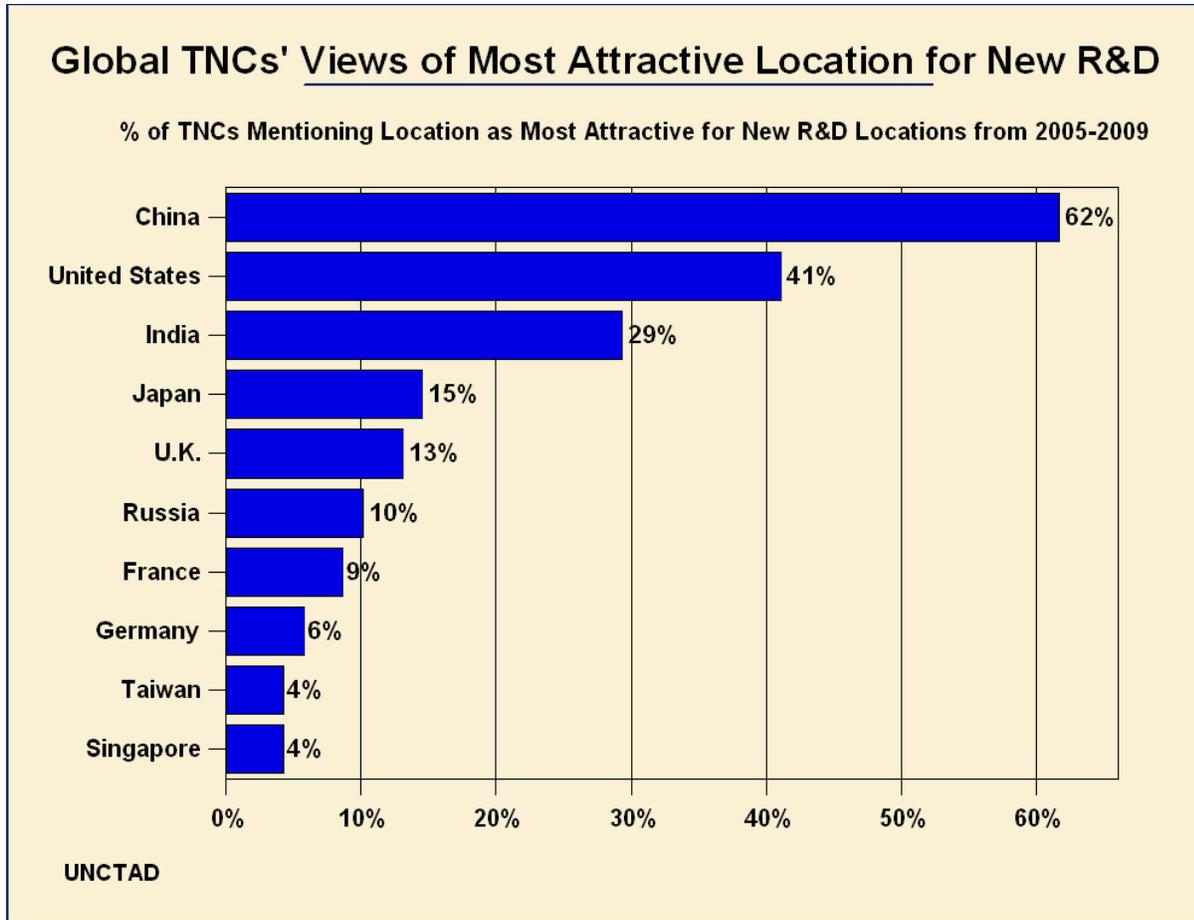
<sup>33</sup> "China welcomes foreign investment in hi-tech industry," *China Daily*, September 27, 2007.

<sup>34</sup> Don Lee, "Research follows factories to China: Engineers and scientists are returning as the country's economy diversifies beyond manufacturing," *Los Angeles Times*, January 14, 2007. See "Features and impacts of the internalization of R&D by transnational corporations: China's case," Zhou Yuan in *Globalization of R&D and Developing Countries*, (NY and Geneva: United Nations Conference on Trade and Development, 2005.) pp. 109-115.

<sup>35</sup> Report on the Work of the Government delivered by Premier Wen Jiabao to the National People's Congress, March 5, 2005. "Tax reforms to continue in 2007," *China Daily*, 1-25-2007.

- Using commercial enterprises and other organizations as cover for technology acquisition.
- Acquiring interests in US technology companies.
- Covertly conducting espionage by personnel from government ministries, commissions, institutes, and military industries independently of the PRC intelligence services.<sup>36</sup>

These methods are incremental, the result of a powerful, patient and pragmatic strategy of negotiations along with other means. But the power of each of these methods -- legal and illegal -- has increased dramatically with China's vastly greater wealth and other developments.<sup>37</sup> (See following page for a brief recent example of China's policy perspective.)



Indeed, surveying the world's major TNCs in 2005, the United Nations Conference of Trade and Development (UNCTAD) found that China was already the overwhelming TNC choice to locate new R&D facilities. China was seen as one of the "most attractive" global locations to site a new R&D facility by 61.8% of TNC whereas the US was identified by only 41.2%, Japan by 14.7%, the UK by 13.2% and Germany by 5.9%. Furthermore, UNCTAD confirmed that "In the past, major corporations used R&D in developing countries largely as a way of adapting products and processes to local markets. But now the trend is increasingly

<sup>36</sup> Select Committee Report, Chapter 1 pp. 20-21.

<sup>37</sup> "Annual Report To Congress: Military Power of the People's Republic of China - 2007", US Department of Defense, May 2007. For mounting commercial concerns in the US and Europe, see for recent examples, "China's cyber-spies spread their net," *Financial Times*, 9-3-2007.

## **“Gov't to guide flow of capital,” February 27, 2007 *China Daily***

The Chinese government will optimize foreign investment inflow to the country to offset any negative impact from policy adjustments, according to a senior commerce official.

"We will encourage foreign investment to industries involved in high-tech, modern services and high-end manufacturing," said Li Zhiqun, director of the commerce ministry's Foreign Investment Department.

He added China will also encourage foreign investors to move from the nation's coastal to central and western regions.

He said the ministry would accelerate plans to publish foreign investment guidelines this year. The information will encourage foreign investors to look at high-tech industries, advanced manufacturing and modern services when investing in China, as well as set up research and development centers in the country.

Meanwhile, an unnamed finance ministry official was quoted by Xinhua News Agency as saying China will use import and export tariffs to guide foreign capital inflows.

New policies will be launched this year, with import tariffs to be used to guide foreign capital flows into the high-tech, agricultural and manufacturing sectors, the official said.

But Li noted there are a number of changes in the country's policies expected to affect the country's ability to lure foreign investors.

According to a draft law, the country will unify income tax rates for domestic and foreign companies at 25 percent. Chinese domestic companies currently pay 33 percent income tax, while foreign companies, which benefit from tax waivers and incentives, pay an average 15 percent.

China also strengthened regulations on processing trade and reduced export tax rebates in some categories and will further adjust land use and environmental protection policies this year, all of which is likely to dampen favorable policies for foreign investors.

"That means some uncertainties in attracting foreign investment," Li said.

According to the latest survey of the United Nations Trade and Development Council, China has replaced the United States as the preferred location for multinationals' research and development centers.

Li said China is expected to benefit from the change because it will help the restructuring of domestic industries and improve the quality of foreign investment.

China received some \$69.5 billion in actual foreign direct investment (FDI) last year, but growing foreign capital also caused strong debate about whether too many foreign mergers and acquisitions (M&As) will hurt domestic industries.

Li said that foreign M&As are not a threat now, as "M&As by foreign investors are actually seldom seen in China and most of the FDI to China is greenfield investment".

Multinational M&A activities in recent years have been small-scale and include the heavy and chemical industries, consumer goods manufacturing and services.

"We hope to avoid foreign investors' monopolies and vicious mergers and keep control of the key sectors to guarantee national economic security," Li said.

towards technology development for regional or global markets, and towards applied research” within the globally integrated network of each TNC.<sup>38</sup>

UNCTAD’s survey confirms that China’s combination of low wages, a large pool of skilled workers and soaring economic growth are highly appealing to the world’s most sophisticated corporations. As the OECD recently also noted, UNCTAD emphasizes that the effects of TNC R&D are not automatic but are dependent on the quality of human resources, institutions and the capabilities of domestic firms. China’s leaders appear quite clear on the need for policy coordination but with uniquely Chinese characteristics different from current Western models.

Specifically, businesses in the US and throughout the old G7 are focused on shedding non-core capabilities and focusing on narrow “niche” markets to survive and, hopefully, to prosper. Many western companies today produce little themselves, depending instead on their well-established brands and core patents as they focus increasingly on “supply-chain management, major scientific breakthroughs and finance. Deeply indebted Western governments are focused on deregulation and the privatization even of core functions like highways and water.

This “dis-integration” or “hollowing-out” has been the key Western strategy for so long that it often now is seen as the only sensible strategy for business or government. As in the reports noted above by the UNCTAD and OECD, China is constantly lectured on the urgent need to adopt this Western model or face dire future consequences. Others, as Michael Spence, Lester Thurow and the Rand team, cited above, seem to deny even the success that China now clearly has attained.

China, on the other hand is pragmatically building diversified, efficient, localized supply chains and large, vertically integrated firms that welcome “Hail Mary” technology breakthroughs (when appropriate) but do not rely on them for continued success. Certainly China’s unprecedented rapid growth has created very serious inequalities, environmental and other problems that need further, perhaps rapid innovation to address. But, as a recent World Bank report notes, China’s remarkable growth and modernization has already lifted 500 million of its people out of severe poverty in just one generation.<sup>39</sup>

China’s remarkable ability to acquire technology does not necessarily imply any intention on the part of China’s rulers beyond the aggressive and sophisticated pursuit of China’s own prosperity and security. ***What is of vital importance, however,*** as former US Senator Ernest (Fritz) Hollings and I have pointed out: “Make no mistake, with China’s much larger population and lower production costs, the only way the US can maintain its high standard of living and military security is to retain vastly superior technology within its borders. This has nothing to do with where a TNC may be incorporated but only with what takes place within US borders. This vital national interest is not being protected and is now in grave and immediate danger.”<sup>40</sup>

The Organization for Economic Cooperation and Development’s found that the purchasing power of spending on R&D in China, and the employment of researchers, exceeded that in

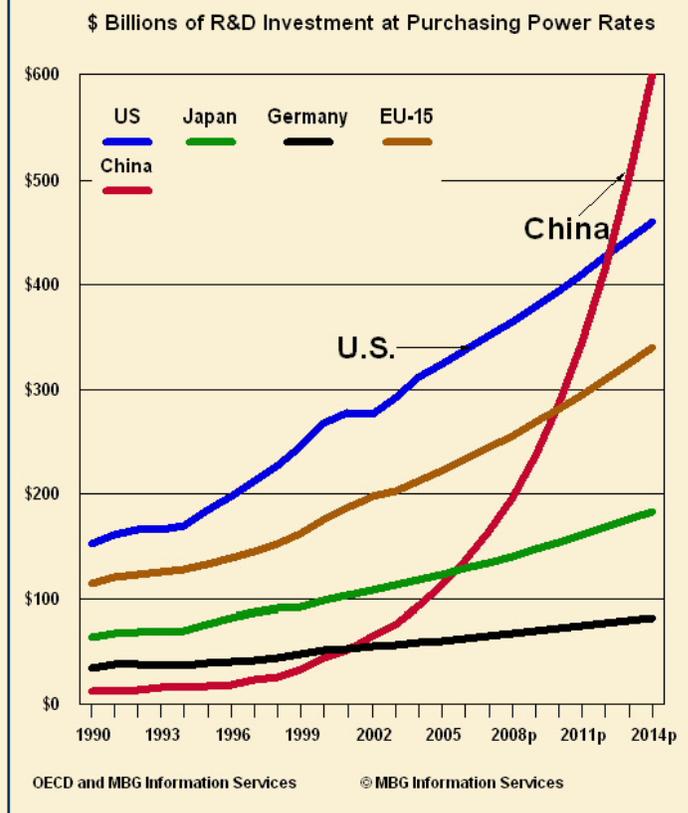
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<sup>38</sup> World Investment Report United Nations New York and Geneva, 2005: Transnational Corporations and the Internationalization of R&D, (NYC and Geneva: UNCTAD, 2005) p.153 and UNCTAD press release, “Developing Countries Emerge As Attractive Locations for R&D,” September 29, 2005. Also OECD Review of Innovation Policy: China, (Paris, OECD, 2007.)

<sup>39</sup> David Dollar, “Poverty, inequality and social disparities during China’s economic reform,” The World Bank white paper, June 2007.

<sup>40</sup> Ernest Hollings and Charles W. McMillion, “China threatens US technology leadership,” *Financial Times*, January 15, 2007.

## China's Soaring R&D Spending



Japan in 2006, becoming second only to the United States. R&D spending in China grew by more than 20% per year for a decade while spending in the US slowed to just 4% in recent years. The OECD points out that if present trends continue, China could pass the United States in just seven years and far exceed the US thereafter. If spending in China accelerates further or if spending in the US continues to slow, China would be the world leader even sooner. Indeed, China's "collaborative" pipelines with the world's leading TNCs mean that actual spending figures grossly underestimate the pace of progress.

"The rapid rise of China in both money spent and researchers employed is stunning," said Dirk Pilat, Head of the OECD's Science and Technology Policy division.<sup>41</sup>

Most R&D in China remains a variation on the theme of reverse-engineering and most advances remain within TNCs.<sup>42</sup> China's

vastly lower production costs allow "fast followers" and "cherry pickers" to reap much of the financial benefit from the innovations of others as it builds infrastructure and supply chains in pursuit of a steady "evolutionary" rather than "revolutionary" approach to innovation. But this is rapidly changing, too, as the 11th Five Year Plan now seeks to use China's new strengths in production to develop their own brands, key technologies and technology standards and to go global.

<sup>41</sup> OECD press release, "China will become world's second highest investor in R&D by end of 2006, finds OECD," December 4, 2006 and the report *OECD Science, Technology and Industry Outlook 2006*, (Paris: OECD, 2006.) The OECD adjusts spending in each country to Purchasing Power Parity. Reported nominal spending on R&D in China, \$139 billion, was more than three times China's reported total nominal military spending.

<sup>42</sup>China's official news sources often emphasize the country's technology dependence as a key challenge to overcome much in the same way the US refers to oil dependence. "China lags far behind in four major scientific fields," *People's Daily*, March 21, 2007.

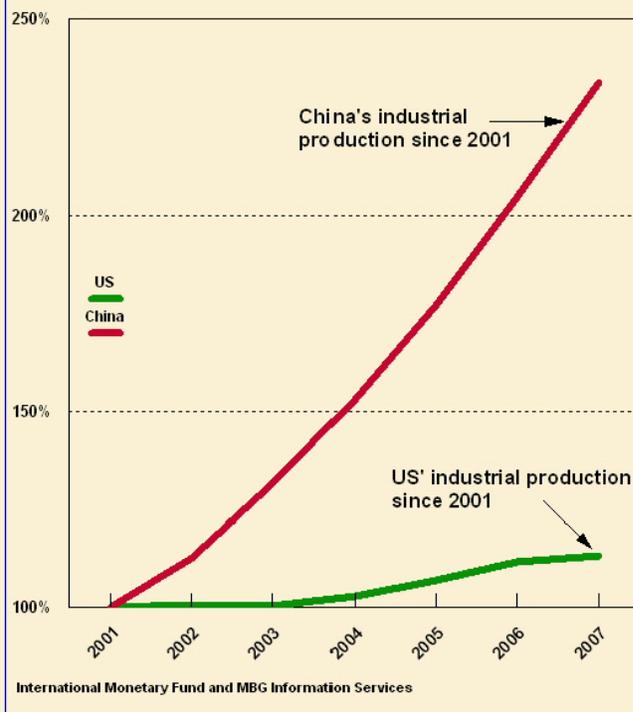
## China's Accelerating Advanced Production and Trade:

Since 2001, US industrial production has increased by an average of 2.1% per year for a total increase of 13.4%. During this time China's industrial production grew by 15.2% per year adding 134.2% to output -- almost exactly 10 times US growth. China's industrial production rose 18.5% yr/yr to June 2007 -- 13 times the 1.4% US growth.<sup>43</sup>

China's strong industrial growth is widespread between industries but increasingly concentrated in fewer very large firms. The combined receipts of China's top 500 companies rose 23.7% to \$2.3 trillion in 2006, equal to 83.5% of total GDP -- up from less than 78% in

### Industrial Production: US and China

% Growth in Industrial Production Since 2001



2005. State-controlled but publicly traded China Petroleum and Chemical Corporation (Sinopec) heads the list with \$139 billion in annual receipts. China National Petroleum Corporation (SNPC,) the State Grid Power Corporation of China (SGPCC,) ICBC and China Mobile -- all state controlled -- round out the top five. Indeed, 349 of the top 500 are state owned or controlled with combined receipts totaling \$2 trillion -- over 75% of China's \$2.6 trillion GDP.<sup>44</sup>

China's state-owned and controlled companies lost money as late as 2000. But with massive restructuring and new management, most are now profitable with the largest 423 reporting combined profits of \$73.1 billion for just the first six months of 2007. SOEs will begin paying dividends in 2008. China Mobile and four other SOEs are now included in Fortune Magazine's list of the world's 500 firms most admired by financial analysts and TNC executives.<sup>45</sup>

China's publicly traded companies reported combined net profits up 70.8%

in the first half of 2007 on 24.5% growth in total revenue.<sup>46</sup>

Rapid growth is driven by 25-30% annual increases in fixed investment, compared with annual fixed investment growth of less than 2% in the US. With Chinese authorities working to

<sup>43</sup> International Financial Statistics, International Monetary Fund. August, 2007.

<sup>44</sup> "Top 500 Enterprises 2007 take up 84% of GDP," *China Daily*, September 1, 2007. Fortune Magazine now lists Sinopec's revenues as the 17th largest in the world -- second only to Toyota in Asia -- and SNPC with the 17 largest profits. 22 of China's state owned companies now make the Fortune Global 500 lists. "Three more on Global 500 list," *China Daily*, July 13, 2007.

<sup>45</sup> See "Economic trade agency: SOEs on track for profits," *ChinaOnline*, October 12, 2000 and "China's major SOEs see total assets reach 16.4 trillion yuan," *China Daily*, July 20, 2007.

<sup>46</sup> "Listed firms post 70% growth in first-half net profits," *China Daily*, August 31, 2007. "SOEs in list of most admired," *China Daily*, September 13, 2007.

slow the pace of direct investment in the first half of 2007, it nonetheless soared by 25.9% yr/yr down only slightly from a 29.8% yr/yr rise in 2006H1. Slowing the rate of investment growth is made more difficult by the current shift of resource-related industries to central and western areas. Investment growth in 2007 is up by 35.6% and 30.2% in the central and western regions, respectively, and up 22.3% in the east.<sup>47</sup>

Housing construction has grown at more than a 20% annual rate since 2001 with even more square meters of new construction reportedly occurring in rural than in urban areas. Annual sales of home furnishings almost tripled by the end of 2006 with overall retail sales up 15.4% yr/yr to June 2007. New commercial construction has stabilized in recent years after several years of strong growth but overall real estate investments were up 28.9% yr/yr to July 2007.<sup>48</sup>

**Infrastructure:** China invested \$1.6 Trillion on basic industries and infrastructure construction just between 2003 and 2006. Infrastructure spending soared almost 30% per year in rural areas between 2001 and 2006. This included 226,000 kilometers of highway and over 4,000 kilometers of railway but also wide-ranging energy and telecommunications projects. 8,711 bus stations were opened in rural areas during 2006. In rural China, an additional 3,000 kms of road are to be added or upgraded in 2007, 74 airports are being built or expanded, and the power grid is being extended to reach more of the 11.5 million Chinese still without electricity.<sup>49</sup>

To cope with the flood of 10-20 million people migrating from western rural areas, the construction of new infrastructure along the urbanized, eastern coastal areas has been even more rapid in recent years. China is also coping with its cycle of double-digit growth and preparing for the 2008 Beijing Olympics and the 2010 Shanghai World Expo. The SPCC is spending a record \$28.6 billion on construction in 2007 largely to start work on a 52,000-km-long, 110-kv-and-above, alternating-current electricity transmission project, with a transformation capacity of 230 million kilo voltage amperes (kva). The SPCC is now operationalizing 48,000 km of 110-kv-and-above alternating-current electricity transmission lines, with a transformation capacity of 190 million kva.

In total, the state-owned electric power industry invested a record \$56.7 billion in 2006 while the state-owned oil and petro-chemical industry invested \$52.0 billion -- some on foreign acquisitions.<sup>50</sup> Despite severe and growing environmental hazards, coal continues to fuel 70% of China power output with coal production rising 18% in the first half of 2007.<sup>51</sup>

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<sup>47</sup> “Analysts detect structural changes in fixed-assets investment,” *China Daily*, July 20, 2007. US data are from the Department of Commerce, Bureau of Economic Analysis.

<sup>48</sup> “China's GDP grows 11.5% in first half year,” *People's Daily*, July 19, 2007. “Over USD 657 billion injected in China's real estate sector,” *Zee News*, January 30, 2006 and Shai Oster, “Property Owners Feel Right at Home in China,” *The Wall Street Journal*, 3-14-2007. “China's fixed assets investment in urban regions up 26.6% in first seven months,” *China Daily*, 8-16-07.

<sup>49</sup> “Investment benefits infrastructure sector,” *China Daily*, September 22, 2007. “One trillion yuan spent on western infrastructure,” *China Daily*, September 6, 2006. “China plans to expand rural road network next year,” *China Daily*, January 4, 2007. “China plans to invest 23.6 bln yuan to extend power grid,” *China Daily*, December 22, 2006. “74 airports to be built in western China,” *China Daily*, March 16, 2007.

<sup>50</sup> “China to make record investment to expand power grids,” *Chinaview*, March 6, 2007. China's extraordinary growth has tested the capacity of its abilities to generate electricity, leading to costly brownouts during 2005 and 2006. For a detailed discussion of problems and current initiatives see the excellent “Power Transmission and Distribution Market in South China,” Interna-

Even more than in other parts of the world, China has struggled in recent years with the availability and quality of water. Spending on water-related construction and treatment services increased rapidly in recent years with the Construction Ministry pledging to accelerate spending to an additional \$130 billion just in urban areas from 2006-2010.<sup>52</sup>

China's rail network has been expanding at the rate of 9.5% per year since 2001 and much of the existing rail has been sharply upgraded. In April 2007, the rail speed limit was raised for the sixth time since 1997 allowing freight and passenger trains in most of China to travel as much as 30% faster, to as fast as 250 kms per hour. The National Development and Reform Commission has also approved the accelerated spending of \$190 billion over the next three years to add 20,000 kms of new rail line and upgrade 15,000 kms of existing rail line. These and other measures are urgently needed to address severe congestion. The Commission has pledged to double rail transport turnover rate between during the 11th 5-Year Plan.<sup>53</sup>

Additionally, the Construction Ministry has pledged \$82 billion in new construction spending to extend subways and light rail systems in 15 large cities over the next 10 years.<sup>54</sup> Similar, massive new seaports, expansions of urban airports and other major infrastructure projects are now underway or well along in the planning stage. New, fixed investment in the telecommunications industry slowed to just 7.5% last year, totaling \$28 billion. But telecom investment is expected to soar immediately when firms are granted licenses for the next, third generation (G3) services, expected early in 2008.<sup>55</sup>

This massive spending on infrastructure improvements since 2001 vastly improved productivity and lowered costs of production in China, helping to offset most if not all of the sharply rising cost of labor. This has kept consumer price increases to just 1.3% per year since 2001. At time of writing, sharply rising food prices, particularly for pork, threaten to raise prices in 2007 by as much as 4% although "core" prices (other than food and energy) are reported up just 0.9% yr/yr to June 2007. China's ongoing infrastructure spending and still very significant modernization plans suggest that strong productivity improvements will likely continue to significantly offset rising costs for at least several more years.

Of course, it is the spectacular growth in manufacturing that is the key to China's ability to sustain its financial, infrastructure and other developments. Over the past five years of rapid and accelerating growth, China has come to be routinely referred to as "the world's factory." China now dominates the world's basic industries. With production increasing by over 20% per year, China produced one-third of the world's steel in 2006; equivalent of the steel produced in the US, Japan, Russia, South Korea and Brazil combined.<sup>56</sup> China is now the world's largest aluminum producer, with four times the US output in 2006.<sup>57</sup> It dominates the world's clothing

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tional Market Insight report by the US Dept. Of Commerce, Foreign Commercial Service in Guangzhou, May 23, 2007. "Energy investment by China's central SOEs beats projections," *China Daily*, February 20, 2007.

<sup>51</sup> "China says coal use surging despite environmental worries," Associated Press, 7-25-2007.

<sup>52</sup> "China to invest RMB 1 trillion to improve its water quality," *Chinaknowledge*, 8-24-2006.

<sup>53</sup> "China plans 5-year leap forward in railway development," *China Daily*, October 6, 2006.

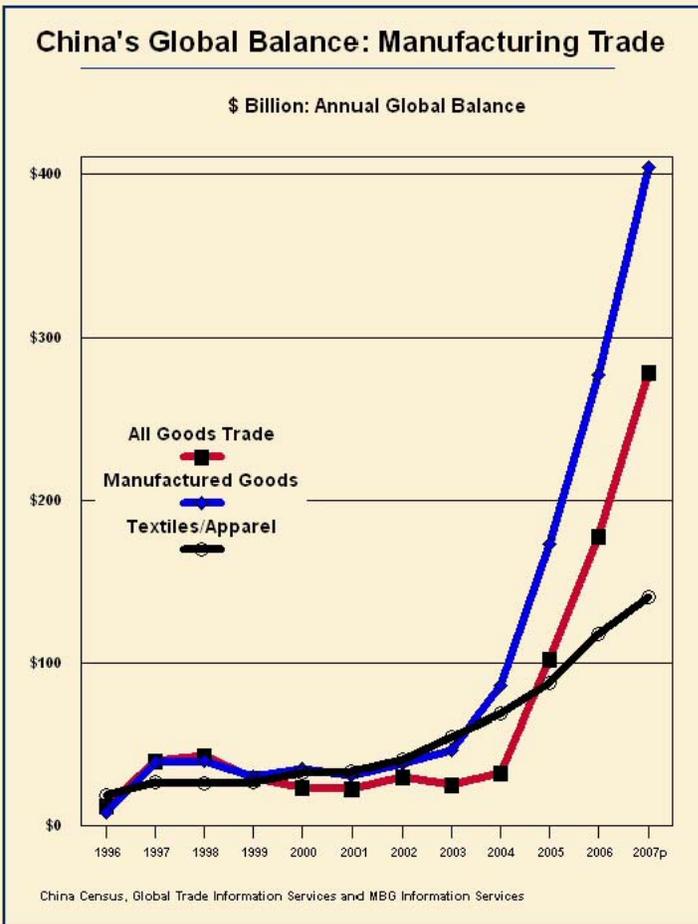
"China's railway network enters high speed era," *People's Daily*, April 13, 2007. Brian Brenner, "China's Great Rail Spree Continues," *BusinessWeek*, March 20, 2007.

<sup>54</sup> "China to invest 620 bln yuan to expand urban rail systems," *China Daily*, July 13, 2007.

<sup>55</sup> "China posts double-digit growth in returns for telecom services," *China Daily*, 1-23-2007.

<sup>56</sup> "China's Steel Export Is Accelerating," *China Daily*, July 25, 2006.

<sup>57</sup> "Production output speeds up as exports and spending rise," 12-14-2006 *China Daily*. Rebecca



and textile, industries and is rapidly moving up the value chain of high quality fashion and new materials.

China's manufacturing sector has undergone profound growth and transformation that was visible to careful analysts long ago but became quite obvious only in the past four years. China's total manufacturing trade passed that of the US in 2006 and has now passed Germany to become the world's largest.

Even with remarkable output growth, as late as 2003, outside of the textile and apparel industry, China produced less manufactured goods than it used for its own consumption and investments. That is, other than textiles and apparel, China was a net global importer of manufactured goods as late as 2003. (see table at pp. 19-20 for China's global industry trade balances)

Global textiles and apparel trade provided China a record \$55.1 billion surplus in 2003, more than that year's entire \$46.6 billion surplus in manufactured goods trade.

Three years later, in 2006, China's textile and apparel surplus with the world had more than doubled to \$117.2 billion but China's total manufacturing surplus had rocketed by 495% to a remarkable record \$277.2 billion, 2.4 times the textile/apparel surplus. Through mid-2007, China's global manufacturing trade surplus was up another 46% yr/yr, headed to near \$400 billion (over 13% of GDP) for all of 2007, near triple the soaring textile and apparel surplus.<sup>58</sup>

China's global surplus in manufactured goods is far more than its surplus in all traded goods because of its enormous and rapidly rising deficits for raw materials to fuel its growth. China's net payments for mineral fuels in 2006 soared to \$71.3 billion and may reach nearly \$80 billion for all in 2007. China's trade deficit for ores, chiefly iron ore, reached \$31 billion in 2006 and may exceed \$50 billion for 2007. The many economic and political effects of China's soaring demands on world raw materials are vital but outside the scope of this report. Likewise, for the growing dependence of Taiwan and others in Asia on their large China trade surpluses.

Bream, "Looking east as worldwide demand soars," *Financial Times*, 11-7-2006.

<sup>58</sup> "Manufacturing is defined here as Harmonize International Industry Series Codes (HS) 28-96 less HS 5201 raw cotton. Textiles and apparel are defined as HS 50-63 less HS 5201. Agriculture is here defined as "foods and tobacco," HS 01-24 and a second grouping for Agriculture plus raw cotton and HS 41, hides and skins. These data are from China's Customs Ministry as reported by Global Trade Information Services.

# China's Soaring Trade Surplus With The World: 2001 - 2007

## Manufacturing Production and Export Are Driving China's Remarkable Growth

HS Codes: \$Millions of Annual Trade Balance	2001	2002	2003	2004	2005	2006	2007*	Totals 2001-'07*
Merchandise Totals.....	\$23,094	\$30,339	\$25,377	\$32,836	\$102,105	\$177,530	\$278,683	\$669,964
28-96 Manufacturing Totals.....	31,009	38,886	46,598	86,185	172,773	277,250	404,029	1,056,730
01-24 Agriculture Totals .....	5,709	7,083	5,137	728	4,296	6,581	5,734	35,268
01-24 Agriculture, HS 5201 Cotton & HS 41 Hides/Skins...	3,454	4,776	1,490	(5,614)	(2,148)	(2,072)	(1,616)	(1,729)
50-63 Textiles and Apparel less 5201 raw cotton.....	33,599	40,886	55,111	68,955	87,427	117,239	140,177	543,394
84 Mechanical/Computers.....	(6,933)	(1,343)	11,844	26,803	53,416	77,190	108,691	269,668
61 Articles Of Apparel And Clothing Accessories, Knit.....	12,990	15,465	20,130	25,163	30,180	44,186	61,328	209,442
62 Articles Of Apparel And Clothing Accessories, Not.....	18,229	19,826	24,301	28,191	34,222	42,842	48,138	215,749
94 Furniture; Bedding, Cushions Etc.; Lamps And Light....	7,241	9,454	12,239	16,480	21,546	27,012	34,306	128,278
73 Articles Of Iron Or Steel.....	3,945	4,496	6,079	9,066	13,337	19,839	34,112	90,874
85 Electrical Machinery And Equipment And Parts There..	(4,587)	(8,159)	(14,978)	(12,362)	(2,507)	8,460	31,400	(2,733)
95 Toys, Games And Sports Equipment; Parts & Access..	8,814	11,253	12,837	14,600	18,520	21,878	25,287	113,189
64 Footwear, Gaiters And The Like; Parts Of Such Arti....	9,762	10,788	12,583	14,731	18,507	21,205	25,146	112,722
72 Iron And Steel.....	(8,699)	(10,929)	(18,816)	(12,166)	(11,127)	5,117	20,550	(36,070)
42 Articles Of Leather; Saddlery And Harness; Travel.....	6,907	7,739	9,388	10,080	11,171	12,046	13,924	71,255
63 Made-Up Textile Articles Nesoi; Needlecraft Sets;.....	3,669	4,353	6,107	7,698	10,221	11,938	13,040	57,026
89 Ships, Boats And Floating Structures.....	1,228	1,319	2,211	2,122	4,228	7,572	11,397	30,076
87 Vehicles, Other Than Railway Or Tramway Rolling St..	239	(692)	(3,725)	(1,133)	4,329	5,341	10,180	14,541
86 Railway Or Tramway Locomotives, Rolling Stock, Tra..	1,991	1,959	3,586	5,148	5,923	5,446	9,488	33,541
83 Miscellaneous Articles Of Base Metal.....	1,213	1,665	1,963	2,953	4,055	5,488	7,856	25,193
69 Ceramic Products.....	1,618	2,185	2,736	3,580	4,739	5,956	6,565	27,379
16 Edible Preparations Of Meat, Fish, Crustaceans, Mo....	2,031	2,307	2,654	3,463	4,339	5,447	6,492	26,733
76 Aluminum And Articles Thereof.....	(764)	(159)	40	236	1,111	3,076	5,869	9,411
82 Tools, Implements, Cutlery, Spoons And Forks.....	1,771	1,990	2,347	2,913	3,593	4,160	5,519	22,292
20 Preparations Of Vegetables, Fruit, Nuts, Or Other.....	1,414	1,647	2,034	2,436	2,942	3,586	5,327	19,387
96 Miscellaneous Manufactured Articles.....	1,271	1,493	1,822	2,473	3,187	3,847	5,013	19,107
28 Inorganic Chemicals; Organic Or Inorganic Compound	1,236	1,084	866	882	2,128	1,340	4,494	12,030
70 Glass And Glassware.....	(143)	151	302	950	1,919	2,642	4,401	10,222
48 Paper And Paperboard; Articles Of Paper Pulp, Pape..	(2,167)	(2,428)	(2,088)	(1,789)	(456)	1,189	4,272	(3,466)
68 Articles Of Stone, Plaster, Cement, Asbestos, Mica....	855	1,045	1,276	1,565	2,222	2,987	3,936	13,887
54 Manmade Filaments, Including Yarns & Woven Fabri...	(1,705)	(904)	151	1,358	2,119	2,798	3,913	7,730
55 Manmade Staple Fibers, Including Yarns & Wovens....	(269)	(471)	(472)	134	1,133	2,703	3,533	6,292
58 Special Woven Fabrics; Tufted Textile Fabrics; Lac....	177	510	849	1,162	1,862	2,526	3,526	10,613
71 Natural Or Cultured Pearls, Precious Or Semiprecio....	1,415	1,509	1,450	1,795	2,062	2,283	3,308	13,820
60 Knitted Or Crocheted Fabrics.....	24	574	868	1,182	1,773	2,487	3,283	10,192
07 Edible Vegetables And Certain Roots And Tubers.....	1,540	1,689	1,940	2,132	2,530	2,959	3,211	16,001
81 Base Metals Nesoi; Cermet; Articles Thereof.....	530	420	751	1,425	1,645	1,941	2,742	9,455
44 Wood And Articles Of Wood; Wood Charcoal.....	(1,160)	(1,308)	(1,176)	(183)	705	2,118	2,469	1,464
65 Headgear And Parts Thereof.....	616	742	932	1,169	1,432	1,735	1,905	8,531
67 Prepared Feathers And Down And Articles Thereof.....	841	899	967	1,085	1,208	1,403	1,685	8,088
10 Cereals.....	427	1,169	2,145	(1,478)	18	218	1,611	4,110
49 Printed Books, Newspapers, Pictures And Other Prin...	116	278	357	562	715	903	1,487	4,419
46 Manufactures Of Straw, Esparto Or Other Plaiting M...	582	719	876	1,029	1,137	1,306	1,480	7,129
66 Umbrellas, Sun Umbrellas, Walking-Sticks, Seat-Sti....	605	579	662	828	951	1,135	1,452	6,213
50 Silk, Including Yarns And Woven Fabrics Thereof.....	715	671	714	922	1,200	1,296	1,242	6,761
03 Fish And Crustaceans, Molluscs And Other Aquatic I...	1,263	1,312	1,471	1,723	1,470	1,589	1,229	10,058
57 Carpets And Other Textile Floor Coverings.....	459	522	591	715	870	994	1,208	5,359
33 Essential Oils And Resinoids; Perfumery, Cosmetic....	234	317	480	537	701	868	1,074	4,211
92 Musical Instruments; Parts And Accessories Thereof...	322	396	525	688	797	886	1,036	4,650
59 Impregnated, Coated, Covered Or Laminated Textile...	(701)	(571)	(400)	(111)	304	562	1,033	116
09 Coffee, Tea, Mate And Spices.....	522	528	596	832	885	935	1,032	5,331
91 Clocks And Watches And Parts Thereof.....	819	825	985	994	897	889	936	6,346
08 Edible Fruit And Nuts; Peel Of Citrus Fruit Or Mel.....	69	177	257	298	411	544	848	2,605
05 Products Of Animal Origin, Nesoi.....	481	462	523	726	791	802	802	4,587
40 Rubber And Articles Thereof.....	(445)	(476)	(1,158)	(933)	(77)	(1,036)	752	(3,372)
21 Miscellaneous Edible Preparations.....	219	281	234	138	406	587	735	2,599
36 Explosives; Pyrotechnic Products; Matches; Pyropho...	283	317	352	397	451	504	627	2,931
43 Furskins And Artificial Fur; Manufactures Thereof.....	312	355	684	1,671	2,272	868	538	6,700
19 Preparations Of Cereals, Flour, Starch Or Milk; Ba....	320	312	379	458	520	502	492	2,983
78 Lead And Articles Thereof.....	228	206	193	336	404	644	486	2,498
24 Tobacco And Manufactured Tobacco Substitutes.....	119	191	185	221	152	102	485	1,455
56 Wadding, Felt And Nonwovens; Special Yarns; Twine..	(70)	(69)	(55)	(23)	154	268	384	589
98 Special Classification Provisions, Nesoi.....	(1,093)	(916)	(311)	(421)	(397)	373	335	(2,430)
01 Live Animals.....	309	290	209	110	220	270	298	1,705
80 Tin And Articles Thereof.....	204	55	57	83	(173)	(147)	150	228

## China's Soaring Trade Surplus With The World: 2001 - 2007

### Manufacturing Production and Export Are Driving China's Remarkable Growth

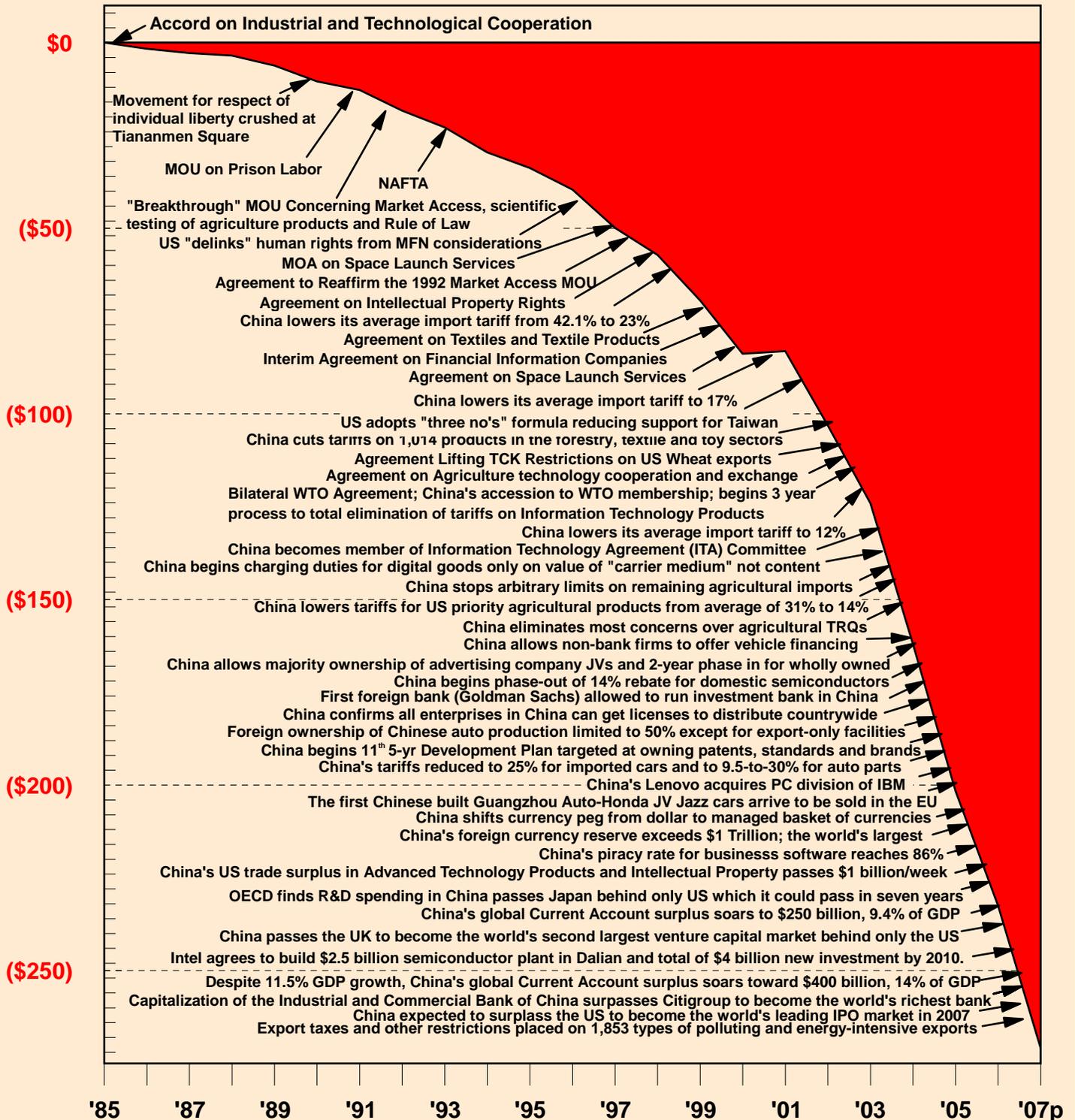
HS Codes: \$Millions of Annual Trade Balance	2001	2002	2003	2004	2005	2006	2007*	Totals 2001-'07*
79 Zinc And Articles Thereof.....	\$377	\$182	\$108	(\$243)	(\$616)	(\$162)	\$134	(\$219)
52 Cotton, Including Yarns And Woven Fabrics Thereof....	721	1,567	1,572	(296)	362	(238)	120	3,808
11 Milling Industry Products; Malt; Starches; Inulin;.....	27	23	6	(19)	25	(11)	101	153
17 Sugars And Sugar Confectionary.....	(221)	(53)	(20)	(84)	(29)	(155)	90	(470)
13 Lac; Gums; Resins And Other Vegetable Saps.....	35	41	22	14	50	80	87	330
97 Works Of Art, Collectors' Pieces And Antiques.....	15	18	15	23	38	53	84	247
25 Salt; Sulfur; Earths And Stone; Plastering Materia.....	576	346	83	(275)	1	426	83	1,240
06 Live Trees And Other Plants; Bulbs, Roots And The....	13	10	4	13	8	36	64	148
93 Arms And Ammunition; Parts & Accessories Thereof....	11	14	14	19	26	37	61	181
22 Beverages, Spirits And Vinegar.....	428	449	439	482	305	504	43	2,650
53 Vegetable Textile Fibers Nesoi; Yarns & Woven Fa.....	185	167	91	83	140	174	28	867
32 Tanning Or Dyeing Extracts; Tannins And Derivative....	(575)	(701)	(1,056)	(1,046)	(595)	(511)	5	(4,477)
45 Cork And Articles Of Cork.....	(8)	(9)	(8)	(11)	(10)	(4)	(14)	(64)
14 Vegetable Plaiting Materials And Vegetable Product....	(22)	(0)	(27)	(44)	(19)	(46)	(28)	(186)
18 Cocoa And Cocoa Preparations.....	(53)	(44)	(61)	(66)	(66)	(60)	(59)	(409)
04 Dairy Produce; Birds' Eggs; Natural Honey; Edible.....	(26)	(78)	(129)	(214)	(195)	(263)	(275)	(1,179)
35 Aluminoid Substances; Modified Starches; Glues;....	(275)	(297)	(329)	(334)	(279)	(335)	(297)	(2,146)
34 Soap Etc.; Lubricating Products; Waxes, Polishing.....	(48)	(77)	(157)	(222)	(300)	(371)	(396)	(1,571)
31 Fertilizers.....	(1,196)	(2,003)	(960)	(976)	(2,040)	(1,312)	(406)	(8,893)
23 Residues And Waste From The Food Industries; Prepa	(343)	(363)	(276)	(444)	(827)	(782)	(464)	(3,499)
37 Photographic Or Cinematographic Goods.....	(40)	(44)	18	50	96	(290)	(563)	(773)
51 Wool And Fine Or Coarse Animal Hair, Including Yar...	(815)	(763)	(365)	(373)	(300)	(143)	(600)	(3,359)
02 Meat And Edible Meat Offal.....	245	40	(111)	230	155	61	(856)	(236)
30 Pharmaceutical Products.....	(248)	(340)	(481)	(465)	(590)	(868)	(1,417)	(4,410)
38 Miscellaneous Chemical Products.....	(1,202)	(2,346)	(3,125)	(2,331)	(2,367)	(3,168)	(2,307)	(16,847)
5201 Raw Cotton, not carded/combed.....	9	(10)	(1,030)	(3,150)	(3,185)	(4,845)	(2,495)	(14,705)
41 Raw Hides And Skins (Other Than Furskins).....	(2,265)	(2,297)	(2,617)	(3,192)	(3,259)	(3,809)	(4,855)	(22,294)
15 Animal Or Vegetable Fats And Oils And Their Cleava..	(658)	(1,471)	(2,802)	(4,045)	(3,023)	(3,533)	(6,781)	(22,313)
88 Aircraft, Spacecraft, And Parts Thereof.....	(3,865)	(3,614)	(4,024)	(4,442)	(5,866)	(9,648)	(8,327)	(39,787)
75 Nickel And Articles Thereof.....	(313)	(376)	(769)	(1,051)	(1,871)	(3,064)	(8,563)	(16,008)
12 Oil Seeds (Soy Beans) & Oleaginous Fruits or Grains..	(2,430)	(1,837)	(4,536)	(6,152)	(6,775)	(6,792)	(8,750)	(37,273)
47 Pulp Of Wood Or Other Fibrous Cellulosic Material;....	(2,726)	(2,884)	(3,875)	(5,277)	(6,147)	(7,086)	(9,554)	(37,549)
39 Plastics And Articles Thereof.....	(8,564)	(9,339)	(11,052)	(14,953)	(15,549)	(15,605)	(19,266)	(94,330)
29 Organic Chemicals.....	(4,371)	(5,589)	(8,873)	(14,718)	(15,901)	(14,316)	(19,353)	(83,120)
74 Copper And Articles Thereof.....	(4,265)	(4,917)	(6,207)	(8,335)	(9,835)	(11,344)	(28,620)	(73,522)
90 Optical, Photographic, Cinematographic, Measuring,....	(3,321)	(6,108)	(14,569)	(23,859)	(24,523)	(26,224)	(29,446)	(128,048)
26 Ores, Slag And Ash.....	(4,086)	(4,099)	(6,925)	(16,702)	(24,799)	(31,027)	(50,779)	(138,418)
27 Mineral Fuels, Mineral Oils And Products Of Their.....	(9,043)	(10,969)	(18,190)	(33,552)	(46,623)	(71,283)	(78,303)	(267,962)

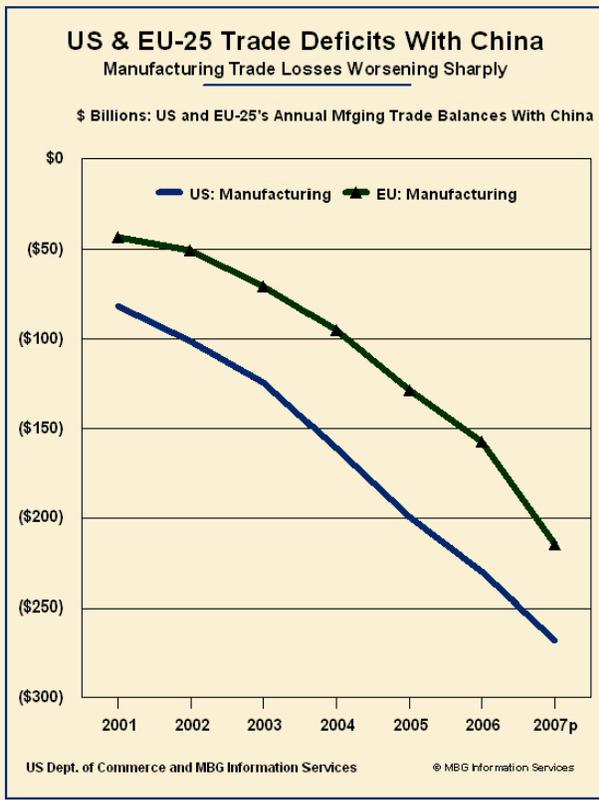
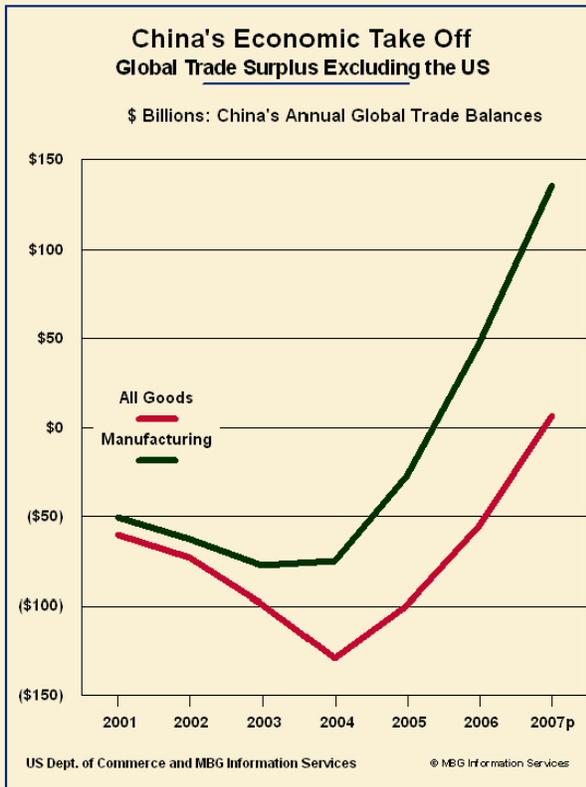
China Customs Ministry and MBG Information Services

\*2007 data are projected from yr-to-June actuals

# US Trade Balance With China

## \$ Billions Per Year: US Merchandise Net Exports





Far more than any other country, for a generation US policy has aggressively pursued a special theory of globalization. The US variant of the theory claims that indiscriminately importing what others can produce more cheaply allows a country to concentrate on what it makes best, the sales of which will pay for imports, raising living standards for all. Chronic and massive US trade deficit and borrowing have shown that reality is far more complex than the theory assumes.

But because US policy was uniquely encouraging to imports, China's entire global trade surplus has, for many years, been derived from the US. That is, as pointed out in my earlier report to the Commission, "China's \$23 billion global surplus in merchandise trade for 2001 includes a surplus of \$83 billion with the US. Excluding the surplus with the US, China experienced a 2001 trade deficit of -\$60 billion with the rest of the world."<sup>59</sup>

China's global manufacturing trade surplus in 2001 was \$31 billion but excluding its -\$82 billion surplus with the US, China's non-US global manufacturing trade had a -\$51 billion deficit. Indeed, China's non-US deficits worsened through 2004.

This changed beginning in 2005. By 2006, China's \$277 billion surplus in global manufacturing trade was so large that even excluding its \$230 billion surplus with the US, China had its first non-US global manufacturing surplus of \$47 billion. Based on China's reported trade balances through June, its global manufacturing surplus seems on track to reach near \$400 billion in 2007. Even excluding China's expected \$268 billion manufacturing trade surplus with the US, China's non-US manufacturing surplus seems set to reach \$130 billion in 2007. Even with China's enormous payments for imported oil, other raw materials and component parts, it's global surplus in all traded goods and its larger current accounts each look set to reach their first non-US surplus in 2007.

<sup>59</sup> Charles W. McMillion, "China's Very Rapid..." p. 2.

# The World's Most Unequal Trading Relationship: US Trade With China

## Since 2002, US Payments for Imports Exceed Earnings From Exports By \$1.1 Trillion

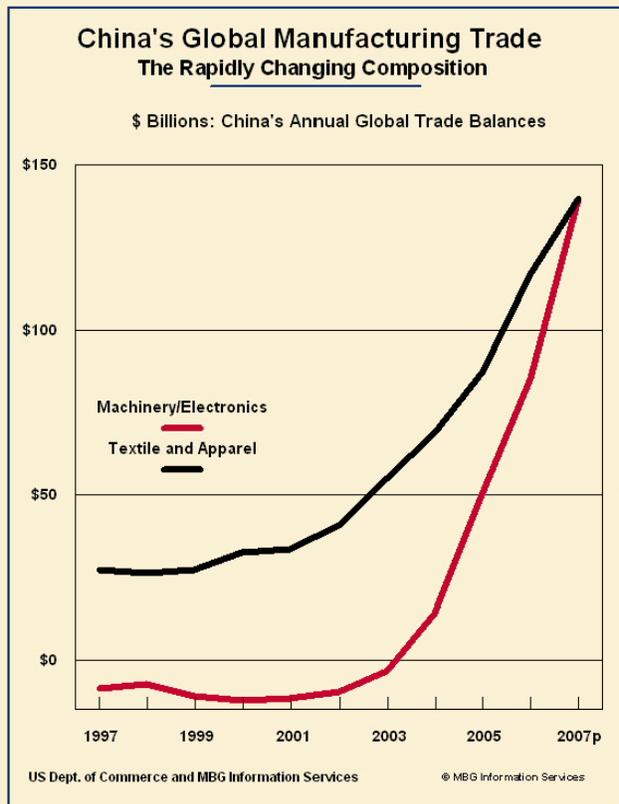
HS Industry: US trade balance with China \$Millions	2001	2002	2003	2004	2005	2006	2007*	Total 2002-'07*
US Total Goods Trade Balances With China.....	(\$83,096)	(\$103,065)	(\$124,068)	(\$161,938)	(\$201,545)	(\$232,549)	(\$271,645)	(\$1,094,809)
US Manufacturing Trade Balances With China.....	(81,583)	(101,167)	(124,146)	(161,256)	(199,622)	(230,144)	(267,905)	(1,084,238)
01-24 Agricultural Foods and Tobacco.....	115	(224)	1,479	977	224	12	205	2,673
01-24 Agriculture, HS 5201 Cotton & HS 41 Hides/Skins..	586	348	2,715	2,924	2,254	2,903	1,212	12,356
50-63 Textiles and Apparel (less 5201 Raw Cotton).....	(8,017)	(9,260)	(11,635)	(14,444)	(21,824)	(25,707)	(34,118)	(116,988)
85 Electrical Machinery And Equipment And Parts There.	(16,295)	(20,463)	(24,004)	(34,115)	(46,249)	(54,728)	(68,804)	(248,363)
84 Mechanical/Computers.....	(9,668)	(16,119)	(25,291)	(37,612)	(46,376)	(54,562)	(56,432)	(236,390)
95 Toys, Games And Sports Equipment; Parts & Access.	(12,186)	(14,417)	(16,082)	(17,164)	(19,074)	(20,840)	(30,791)	(118,367)
94 Furniture; Bedding, Cushions Etc.; Lamps And Light...	(7,404)	(9,844)	(11,738)	(14,337)	(16,943)	(19,234)	(20,180)	(92,275)
62 Articles Of Apparel And Clothing Accessories, Not.....	(4,126)	(4,464)	(5,485)	(6,607)	(10,220)	(11,847)	(15,375)	(53,998)
64 Footwear, Gaiters And The Like; Parts Of Such Arti....	(9,710)	(10,192)	(10,527)	(11,316)	(12,679)	(13,832)	(14,476)	(73,022)
61 Articles Of Apparel And Clothing Accessories, Knit.....	(2,273)	(2,614)	(3,193)	(4,093)	(6,554)	(8,000)	(13,300)	(37,753)
73 Articles Of Iron Or Steel.....	(2,020)	(2,438)	(3,085)	(4,376)	(5,887)	(7,970)	(9,937)	(33,693)
42 Articles Of Leather; Saddlery And Harness; Travel.....	(3,898)	(4,465)	(5,043)	(5,699)	(6,248)	(6,823)	(7,318)	(35,595)
63 Made-Up Textile Articles Nesoi; Needlecraft Sets;.....	(1,201)	(1,647)	(2,353)	(3,054)	(3,954)	(4,613)	(5,147)	(20,769)
87 Vehicles, Other Than Railway Or Tramway Rolling St..	(1,299)	(1,657)	(2,035)	(2,723)	(3,269)	(3,843)	(4,281)	(17,808)
39 Plastics And Articles Thereof.....	(2,398)	(2,782)	(3,036)	(3,398)	(4,381)	(4,749)	(4,147)	(22,493)
83 Miscellaneous Articles Of Base Metal.....	(963)	(1,256)	(1,415)	(1,809)	(2,243)	(2,908)	(3,327)	(12,957)
44 Wood And Articles Of Wood; Wood Charcoal.....	(701)	(837)	(1,020)	(1,450)	(1,847)	(2,447)	(2,599)	(10,201)
40 Rubber And Articles Thereof.....	(403)	(581)	(699)	(1,037)	(1,552)	(2,028)	(2,566)	(8,462)
90 Optical, Photographic, Cinematographic, Measuring,...	(1,510)	(1,517)	(1,649)	(1,703)	(1,729)	(1,846)	(2,439)	(10,884)
82 Tools, Implements, Cutlery, Spoons And Forks.....	(941)	(1,110)	(1,373)	(1,553)	(1,775)	(1,979)	(2,287)	(10,078)
71 Natural Or Cultured Pearls, Precious Or Semiprecio....	(803)	(1,144)	(1,393)	(1,713)	(2,065)	(2,217)	(2,132)	(10,664)
96 Miscellaneous Manufactured Articles.....	(841)	(913)	(1,024)	(1,204)	(1,404)	(1,565)	(1,827)	(7,937)
49 Printed Books, Newspapers, Pictures And Other Prin..	(378)	(529)	(653)	(892)	(1,130)	(1,330)	(1,782)	(6,317)
69 Ceramic Products.....	(864)	(1,025)	(1,112)	(1,164)	(1,317)	(1,549)	(1,676)	(7,844)
48 Paper And Paperboard; Articles Of Paper Pulp, Pape..	(306)	(403)	(612)	(804)	(1,083)	(1,398)	(1,439)	(5,740)
03 Fish And Crustaceans, Molluscs And Other Aquatic I..	(446)	(566)	(722)	(705)	(743)	(987)	(1,235)	(4,957)
67 Prepared Feathers And Down And Articles Thereof.....	(958)	(1,047)	(1,092)	(1,109)	(1,146)	(1,202)	(1,224)	(6,819)
70 Glass And Glassware.....	(440)	(544)	(621)	(732)	(911)	(1,041)	(1,189)	(5,037)
68 Articles Of Stone, Plaster, Cement, Asbestos, Mica....	(601)	(690)	(712)	(786)	(925)	(1,075)	(1,167)	(5,355)
65 Headgear And Parts Thereof.....	(334)	(479)	(628)	(740)	(867)	(999)	(1,035)	(4,747)
20 Preparations Of Vegetables, Fruit, Nuts, Or Other.....	(143)	(184)	(295)	(386)	(476)	(531)	(903)	(2,774)
91 Clocks And Watches And Parts Thereof.....	(603)	(623)	(682)	(759)	(695)	(687)	(683)	(4,129)
29 Organic Chemicals.....	(317)	(195)	17	108	(483)	(839)	(635)	(2,026)
92 Musical Instruments; Parts And Accessories Thereof...	(317)	(391)	(439)	(533)	(564)	(535)	(545)	(3,008)
27 Mineral Fuels, Mineral Oils And Products Of Their.....	(292)	(323)	(319)	(807)	(854)	(967)	(525)	(3,796)
98 Special Classification Provisions, Nesoi.....	(224)	(216)	(307)	(347)	(413)	(474)	(523)	(2,281)
16 Edible Preparations Of Meat, Fish, Crustaceans, Mo...	(87)	(155)	(233)	(267)	(326)	(464)	(469)	(1,914)
25 Salt; Sulfur; Earths And Stone; Plastering Materia.....	(223)	(167)	(178)	(222)	(403)	(681)	(461)	(2,112)
33 Essential Oils And Resinoids; Perfumery, Cosmetic....	(132)	(164)	(165)	(185)	(231)	(273)	(458)	(1,476)
66 Umbrellas, Sun Umbrellas, Walking-Sticks, Seat-Sti...	(234)	(218)	(264)	(295)	(331)	(347)	(397)	(1,852)
97 Works Of Art, Collectors' Pieces And Antiques.....	(153)	(149)	(161)	(158)	(268)	(258)	(377)	(1,370)
57 Carpets And Other Textile Floor Coverings.....	(214)	(253)	(277)	(283)	(299)	(338)	(356)	(1,806)
07 Edible Vegetables And Certain Roots And Tubers.....	(55)	(83)	(89)	(127)	(155)	(217)	(346)	(1,017)
72 Iron And Steel.....	261	251	882	51	337	(376)	(320)	825
46 Manufactures Of Straw, Esparto Or Other Plaiting M...	(229)	(279)	(304)	(315)	(344)	(326)	(314)	(1,883)
58 Special Woven Fabrics; Tufted Textile Fabrics; Lac....	(49)	(70)	(95)	(119)	(195)	(237)	(249)	(965)
05 Products Of Animal Origin, Nesoi.....	(131)	(159)	(181)	(218)	(211)	(210)	(241)	(1,219)
22 Beverages, Spirits And Vinegar.....	(18)	(22)	(18)	(19)	(13)	(91)	(221)	(383)
36 Explosives; Pyrotechnic Products; Matches; Pyropho..	(130)	(141)	(171)	(176)	(209)	(208)	(202)	(1,106)
86 Railway Or Tramway Locomotives, Rolling Stock, Tra.	(24)	(36)	(91)	(91)	(184)	(137)	(185)	(724)
28 Inorganic Chemicals; Organic Or Inorganic Compounc	(324)	(359)	(337)	(270)	(297)	(271)	(185)	(1,719)
93 Arms And Ammunition; Parts & Accessories Thereof...	(15)	(32)	(38)	(55)	(72)	(121)	(149)	(467)
60 Knitted Or Crocheted Fabrics.....	5	(35)	(46)	(52)	(124)	(113)	(139)	(508)
80 Tin And Articles Thereof.....	(82)	(48)	(50)	(90)	(77)	(80)	(117)	(461)
89 Ships, Boats And Floating Structures.....	(51)	(25)	(23)	(25)	(66)	(98)	(116)	(354)
54 Manmade Filaments, Including Yarns & Woven Fabri..	3	11	9	(19)	(112)	(90)	(113)	(316)
76 Aluminum And Articles Thereof.....	85	(91)	(122)	(230)	(315)	125	(103)	(735)
09 Coffee, Tea, Mate And Spices.....	(46)	(55)	(68)	(85)	(92)	(89)	(101)	(489)
81 Base Metals Nesoi; Cermets; Articles Thereof.....	(107)	(47)	(40)	(97)	286	397	(95)	403
23 Residues And Waste From The Food Industries; Prep;	42	51	47	23	(17)	(76)	(91)	(64)
53 Vegetable Textile Fibers Nesoi; Yarns & Woven Fa....	(16)	(21)	(28)	(55)	(46)	(63)	(90)	(303)
43 Furskins And Artificial Fur; Manufactures Thereof.....	(87)	(91)	(118)	(139)	(118)	(88)	(80)	(635)
19 Preparations Of Cereals, Flour, Starch Or Milk; Ba....	(22)	(28)	(34)	(39)	(52)	(69)	(79)	(301)
17 Sugars And Sugar Confectionary.....	(4)	(34)	(29)	(29)	(59)	(69)	(74)	(295)
50 Silk, Including Yarns And Woven Fabrics Thereof.....	(37)	(35)	(38)	(56)	(62)	(75)	(74)	(340)
13 Lac; Gums; Resins And Other Vegetable Saps.....	(30)	(34)	(34)	(50)	(50)	(58)	(74)	(300)
59 Impregnated, Coated, Covered Or Laminated Textile..	6	2	2	(28)	(63)	(70)	(55)	(213)
32 Tanning Or Dyeing Extracts; Tannins And Derivative...	6	(19)	(26)	(55)	(82)	(60)	(43)	(285)

## The World's Most Unequal Trading Relationship: US Trade With China

### Since 2002, US Payments for Imports Exceed Earnings From Exports By \$1.1 Trillion

HS Industry: US trade balance with China \$Millions	2001	2002	2003	2004	2005	2006	2007*	Total 2002-'07*
31 Fertilizers.....	\$398	\$672	\$402	\$257	\$322	\$185	(\$29)	\$1,808
18 Cocoa And Cocoa Preparations.....	(5)	(1)	0	(14)	(32)	(35)	(28)	(110)
79 Zinc And Articles Thereof.....	(73)	(74)	(50)	(27)	(32)	(25)	(27)	(234)
34 Soap Etc.; Lubricating Products; Waxes, Polishing.....	(133)	(164)	(169)	(195)	(135)	(52)	(25)	(740)
21 Miscellaneous Edible Preparations.....	23	5	98	120	14	(5)	(23)	208
30 Pharmaceutical Products.....	(27)	(8)	(26)	(44)	(105)	(92)	(22)	(297)
45 Cork And Articles Of Cork.....	(1)	(2)	(5)	(8)	(11)	(17)	(22)	(65)
06 Live Trees And Other Plants; Bulbs, Roots And The....	(9)	(11)	(14)	(13)	(15)	(17)	(20)	(91)
08 Edible Fruit And Nuts; Peel Of Citrus Fruit Or Mel.....	7	(4)	(12)	(27)	28	(2)	(19)	(36)
01 Live Animals.....	3	2	9	(11)	(7)	(12)	(19)	(38)
10 Cereals.....	21	28	13	480	80	8	(14)	595
14 Vegetable Plaiting Materials And Vegetable Product....	(4)	(6)	(6)	(0)	(12)	(7)	(9)	(39)
11 Milling Industry Products; Malt; Starches; Inulin;.....	2	(0)	(5)	(8)	(7)	(12)	(7)	(39)
55 Manmade Staple Fibers, Including Yarns & Wovens....	56	47	47	104	49	(52)	(5)	190
35 Albuminoidal Substances; Modified Starches; Glues;...	35	25	36	33	1	14	(2)	107
51 Wool And Fine Or Coarse Animal Hair, Including Yar..	(3)	(2)	4	(0)	(10)	(8)	(2)	(19)
78 Lead And Articles Thereof.....	(16)	2	12	(0)	(19)	(51)	(1)	(58)
56 Wadding, Felt And Nonwovens; Special Yarns; Twine,	(24)	(6)	(6)	(21)	(43)	15	(0)	(62)
24 Tobacco And Manufactured Tobacco Substitutes.....	(24)	(33)	(12)	7	(6)	51	52	60
15 Animal Or Vegetable Fats And Oils And Their Cleava..	8	22	94	24	7	48	75	270
04 Dairy Produce; Birds' Eggs; Natural Honey; Edible.....	4	11	(10)	3	13	50	98	165
75 Nickel And Articles Thereof.....	17	22	26	46	74	74	120	362
37 Photographic Or Cinematographic Goods.....	36	72	95	(23)	(12)	67	131	329
38 Miscellaneous Chemical Products.....	133	135	96	257	209	266	510	1,473
02 Meat And Edible Meat Offal.....	66	74	134	57	188	354	655	1,462
52 Cotton, Including Yarns And Woven Fabrics Thereof...	(101)	(29)	586	1,261	1,215	1,845	787	5,665
26 Ores, Slag And Ash.....	5	(7)	34	105	373	406	799	1,709
41 Raw Hides And Skins (Other Than Furskins).....	428	427	477	526	624	831	1,006	3,891
74 Copper And Articles Thereof.....	140	154	435	345	545	1,026	1,772	4,277
47 Pulp Of Wood Or Other Fibrous Cellulosic Material;....	329	414	605	743	990	1,471	1,968	6,192
12 Oil Seeds And Oleaginous Fruits (Soy Beans).....	964	956	2,846	2,261	2,165	2,452	3,297	13,978
88 Aircraft, Spacecraft, And Parts Thereof.....	2,389	3,374	2,368	1,871	4,297	5,956	8,514	26,381

China Customs, Global Trade Information Services and MBG Information Services \*2007 data are projected from yr-to-June actuals.



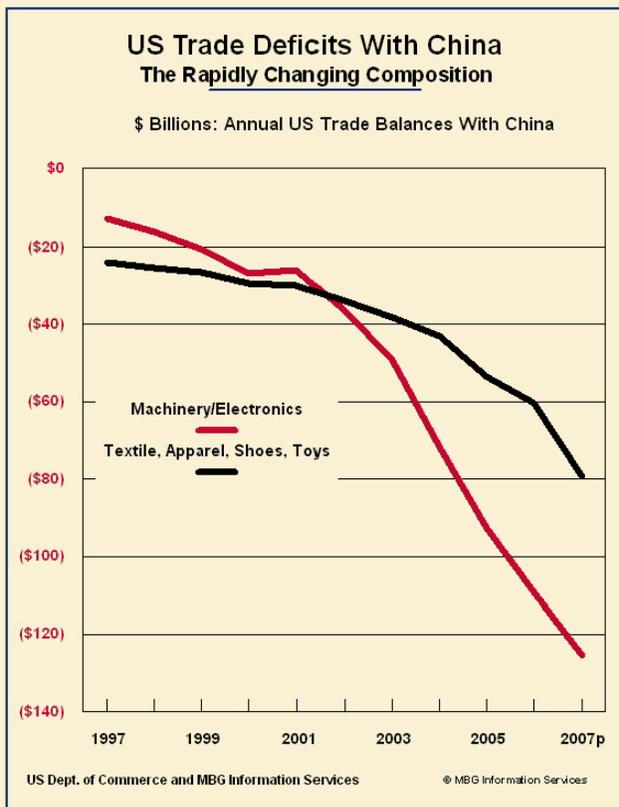
China's manufacturing surplus is soaring not only with the US but also with the European Union (25.)<sup>60</sup> Although China's manufacturing surplus with the US has grown at an average annual rate of 22% since 2001 -- including 16% in 2007 -- China's surplus with the EU soared by 32% per year, including by 41% for the first four months of 2007. The EU's -\$41 billion manufacturing deficit with China in 2001 soared to -\$157 billion in 2006 and could exceed -\$220 billion in 2007. This explosion in the EU's deficit with China has pushed the EU's global goods deficits from -\$77 billion in 2004 to -\$216 billion in 2006 and about the same in 2007.

That is, the US and the EU had a combined Manufacturing trade deficit with China of -\$387 billion in 2006 and this could approach -\$500 billion in 2007 -- equal to about 16.5% of China's GDP.

Clearly, surging manufacturing trade deficits with China are now an enormous problem that the US and the EU share.

Japan is different. It is the only Asian country to have a Manufacturing trade deficit with China but, according to Japan's Customs data, that deficit was only -\$19 billion in 2006 and it looks set to fall to -\$16 billion in 2007. However, this reflects dormant demand growth and a very weak economy in Japan. It certainly does not suggest that Japan has discovered successful means to cope with China's productive might.

As the trade data demonstrate, the transformation within China's manufacturing sector is as impressive as its overall growth. After many years focused on "process trade," importing and producing less of many key manufactured goods than it needed for its rapid growth, China is now a large net exporter of iron, steel and aluminum. As late as 2003, China was a net global importer of the large, key segment of modern manufacturing identified as machinery and electronics -- HS 84 and 85. But in just three years, China's



<sup>60</sup> EU and Japan data are provided through Global Trade Information Services, Inc.

-\$3.1 billion combined deficit in the production of machinery and electronics became a 2006 surplus of \$85.6 billion. Through June 2007 this surplus was expanding by 64%, on a pace to reach \$140 billion for the year, pulling even with China's also still fast-rising surplus in textiles and apparel.

Despite pervasive misreporting in the business and other media, electronics and machinery have long been the major US import from China although this is partially offset by US exports. But since 1999, machinery and electronics have accounted for more of the US manufacturing trade deficit with China than have stereotype "labor intensive" products. In 2006, the US deficit with China for machinery and electronics was -\$109.3 billion while the deficit for textiles, apparel, toys, games and sports equipment was -\$45.5 billion. Through June 2007, the annual US deficit in machinery and electronics is set to be three-times as large as the deficit in textiles, apparel, toys, games and sports equipment, -\$125 billion to -\$32 billion, respectively.<sup>61</sup> Since 2003, the EU has been following a similar path in the composition of its manufacturing deficits with China; in 2006 their deficits for machinery and electronics reached -\$74.5 billion while deficits for textiles, apparel, toys, games and sports equipment was -\$41.3 billion with each deficit worsening by about 25% in early 2007.

As the data tables on page 19 and 20 suggest, the rapid development of China's manufacturing sector is broad-based. Already by 2001 China had substantial global trade surpluses in both agriculture and manufacturing and in 58 of the 97 HS goods industries. By 2007, China has global surpluses in 72 of the 97 goods industries. Of the 68 manufacturing industries (HS 28-96,) China had global trade surpluses in 39 in 2001 and now has surpluses in 52.

China's bilateral trade with the US is even more one-sided. The data tables on page 23 and 24 show that the US had deficits with China in 70 of the 97 goods industries in 2001 and in 83 of the 97 in 2007. Among manufacturing industries, the US had deficits in 52 of the 68 in 2001 and deficits in 60 of 68 in 2007.

These broad manufacturing gains are the result of China's unique size and resources and its patient and sophisticated industrial policy process that has allowed it to build strong, modern supply chains with the help of the world's best TNCs. Under President Deng Xiaoping, the so-called 863 Program was adopted in 1986 dedicated to modernizing China's economy by accelerating the acquisition and development of science and technology for both commercial and military use. From targeting "pockets of excellence," China is quickly developing upstream and downstream networks of excellence, spreading throughout the economy.<sup>62</sup>

Senior Chinese scientists developed science and technology goals in the late 1980s and continue to update the goals and monitor the progress for each Five Year Development Plan. The 863 Program was initially supported by nearly 30,000 scientific and technical personnel, working to advance modernization, producing about 1,500 identifiable research achievements by 1996. Most important, the Program helped identify many infrastructure, supply chain, expertise and other needs necessary to narrow the gap between China and the West.

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<sup>61</sup> HS 95, "Toys, Games, Sports Equipment and parts" includes a rapidly increasing share of video games, equipment and other products that are more like electronics than Barbie Dolls.

<sup>62</sup>See the excellent introduction to the organizational structure of the Chinese Communist Party, the State and the People's Liberation Army, and the stated goals and strategies for China's acquisition of US technology in Chapter 1 of the Cox Commission report. *op cit*. A useful discussion of China's early targeting of "pockets of excellence" can be found in the testimony of the Deputy US Under Secretary of Defense for Technology Security Policy, "The Challenge of China," before the US-China Commission, January 17, 2002.

The US Government Accounting Office notes that to encourage modernization and new product development, China constructed 53 “Silicon Valley”-style, high-technology development zones among many other supporting mechanisms.<sup>63</sup> In late 2001 China's Ministry of Information Industry (MII) consolidated 46 research institutes and 26 manufacturers into the China Electronic Technology Corporation (CETC) with the aim of beginning to develop and produce globally competitive proprietary products within five to ten years.

TNCs have been at the core of China's pragmatic modernization drive. Successive Five-Year Development Plans have maintained an integrated set of evolving industrial policies including, since 1995, explicit measures to either "encourage, permit, restrict or ban" TNC involvement in very detailed, catalogued areas of technology and goods and services production. Since the late 1990s, these policies are designed to force foreign investors to transfer technology and expertise and help China move away from low value-added import/export “processing” of mature, last-generation products and (recently) of energy-intensive manufacturing, shifting to ever more state-of-the-art ventures in “...high-tech, modern service and high-end manufacturing sectors, research and development, and energy-efficient and environmental-friendly projects.”<sup>64</sup>

An excellent US Commerce Department study of US technology transfer to China in the late 1990s was the first to verify from interviews with business leaders that the transfer of advanced US technology had become the price of market access for high technology TNCs.<sup>65</sup> When the report was published in 1999, China's already rapidly improving infrastructure and the localization of top quality suppliers -- along with the long anticipated potential market of 1.3 billion consumers -- had already led to rapidly accelerating demands for technology transfer and other offsets. The DOC findings indicated that already by 1999, as a means to shorten their lag in the product cycle, China's preferred offset demand was the establishment of joint R&D centers.

China's WTO membership formally prohibits requiring offsets as a condition of investment. But, as the United States Trade Representative continues to report, China's “encouragement” can effectively become a business requirement. As Vice Premier Wu Yi recently noted, “While China still welcomes all forms of foreign investment it will open up its arms wider to investors who have advanced technologies to offer.”<sup>66</sup>

It should be noted that like almost every other member of China's current senior leadership, Wu Yi was educated in math and engineering and devoted much of her successful early career to engineering before ascending to progressively more responsible management positions

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<sup>63</sup>US Government Accounting Office, Export Controls: Rapid Advances in China's Semiconductor Industry Underscore Need for Fundamental US Policy Review, (Washington, DC: GAO, 2002) p. 16.

<sup>64</sup> “Ministry of Commerce publishes guidelines on foreign investment for 2007,” Ministry of Commerce, March 27, 2007. See also, US Department of Commerce, International Trade Administration, International Marketing Insights, "New Rules on Foreign Investment: China," March 22, 2002. A good assessment of China's powerful strategy and early success in technology modernization is US Department of Commerce, Bureau of Export Administration [renamed the Bureau of Industry and Security,] US Commercial Technology Transfers to the People's Republic of China, (Washington, DC: US Government Printing Office, 1999.) For targeting strategies regarding FDI, see Part I pages 26-31.

<sup>65</sup>Executive Summary," US Commercial Technology Transfers to the People's Republic of China, p. 2.

<sup>66</sup> See the section on China in the 2007 National Trade Estimate Report on Foreign Trade Barriers, Office of the United States Trade Representative, April 2007, pp. 79-147. And “China gets picky with foreign investment,” China Ministry of Commerce press release, September 8, 2006.

in large organizations, including as vice major of Beijing. China's President, Hu Jintao was also trained in math and engineering and spent much of his successful early career in related management in large-scale operations. The theme of China's current 11th-Five Year Development Plan is that it is "based on the concept of scientific development." China's leadership appears well prepared to pursue this analytical goal removed from many of the "political" considerations that are believed to affect decision-making in democratic governments.<sup>67</sup> Its leadership might therefore be more usefully compared to the executive committee of a very large TNC or private equity firm than to democratically elected Western politicians.

China's admission to the World Trade Organization -- with the promise of unfettered access of Chinese production to global markets -- greatly increased the pressures on virtually all the world's leading transnational firms to rapidly accelerate their production and sourcing in China. Conversely, and perhaps ironically, WTO membership greatly increased the leverage of China's leadership in playing-off each TNC against all others.

Motorola, one of the more aggressive transnationals that lobbied the US Congress for China's WTO admission, has also been the largest foreign investor in China and one of the strongest forces for localization of production and research. At Motorola's annual board meeting, held in Beijing in November 2001, Chairman and CEO Christopher Galvin announced Motorola's "three ten billion" plan for China: \$10 billion in output, \$10 billion in investments and \$10 billion in localized Chinese sourcing including an acceleration of R&D to assure state-of-the-art product and process production in China. Indeed, Motorola was China's 3rd largest exporter in 2005 and 7th largest in two-way trade with exports of \$6.45 billion and imports of \$2.36 billion.<sup>68</sup>

Ford Motor also pledged soon after China's WTO admission to raise its sourcing in China from \$1 billion per year to \$10 billion or more and accelerate R&D cooperation.<sup>69</sup> Many other large TNCs made similar pledges to localize advanced production, sourcing and R&D. Importantly, Japanese firms that -- unlike top US and EU TNCs -- were reluctant to source advanced operations and technology in China before 2001, began aggressively trading its current technologies and R&D for market access after 2001, adding more pressures on all TNCs.<sup>70</sup>

Even more than the accelerating *quantity* of product and process sourcing in China, the quality of TNC operations abruptly improved. Jiang Xiaojuan, vice director of the Finance and Trade Department of the Chinese Academy of Social Sciences detailed the results of research on global firms operating in China at that time.<sup>71</sup> Dr. Jiang and his Academy team found that in

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<sup>67</sup> See "Who's Who in China's Leadership," China.org.cn and "Vice premier calls for better work on next Five-Year program," *Chinaview*, December 5, 2005.

<sup>68</sup> China's largest exporter is Hong Fu Jin Precision, a subsidiary of Foxconn, Taiwan's largest privately-held firm in 2005. "2005 Top 500 Import and Export Enterprises in China," MOFCOM press release, December 29, 2006.

<sup>69</sup>"Motorola Chairman Announces 'Three Ten Billion' Plan for China," *ChinaOnline*, November 8, 2001. Caroline Daniel, "Fort to buy \$1bn a year in Chinese auto parts," *Financial Times*, September 18, 2002. One of the best, enduring summaries of the remarkable and united lobbying by top TNCs and past US government officials in the US on China's behalf remains John Judis, "Chinatown," *The New Republic*, March 10, 1997.

<sup>70</sup> See discussion in Charles McMillion, "China's Very Rapid..." op. cit. pp. 14-15.

<sup>71</sup>This research was presented to the 2002 China Business Founders Summit, sponsored by Time Magazine and the Business School of Renmin University of China. Reported in *ChinaOnline*, "Multinationals change China strategies to boost competitiveness," May 7, 2002.

1997 only 13% of foreign firms in China applied the parent company's most advanced technologies in China. By 2001 that proportion had risen to 41% and he expects it to exceed 50% in 2002 and to accelerate further. Their research found, for example, that no cars made by foreign firms in China in 1997 could be classified as having the most advanced technologies. But in 2001, 70% of car-making joint ventures in China provided high-end products. Among the 13 new types of cars rolling off Chinese production lines in 2002, the production of at least 10 types occurred at the same time as in the foreign companies' home country. Dr. Jiang found that competition accelerated so quickly and with such sophistication that foreign firms were forced to provide their very best products and technologies in order to maintain their operations and make further progress.

Dr. Jiang notes that until the late 1990s, TNCs' operations were mainly focused on low-end, labor-intensive manufactured goods. But intense competition from purely domestic firms in these products made such operations unprofitable. Most TNCs discovered by 2001 that profits in China were possible only in operations with advanced products and processes.

Because of this increased leverage, even leading Taiwanese technology firms such as Acer, Delta Electronics and Hon Hai Precision Industrial Company overcome Taiwan government prohibitions and began transferring modern product and process technologies and operations to China's mainland and even setting up joint R&D centers.<sup>72</sup>

Even the relatively large price-adjusted dollar value invested in R&D centers in China can be misleading in today's tightly networked environment. R&D centers in China have quickly become part of the "global team" of their international partners. For example, the web site of GE Corporate Research & Development featured its R&D center in Shanghai soon after it was established in 2002 -- GE's third such center joining centers in Niskayuna, New York and Bangalore, India. The Director of GE's Shanghai R&D center, Dr. Xiangli Chen explained:

*There are several factors that make us unique: we are multi-disciplined and we are integrated with the global R&D team. What does that mean? You might be a physicist in China who works closely with a structural engineer in Bangalore, India or Niskayuna, USA. Our curiosity and fascination with technology draws us together, and we are driven to push its boundaries.*

Indeed, being an integral member of a large, global team is one the key advantages that TNCs have in recruiting and retaining top technical talent in China. Most R&D centers are joint operations with Chinese government controlled universities or other enterprises or they are at least dedicated to working in co-production ventures with Chinese government controlled firms. For example, no joint venture partner was announced for GE's first R&D center, but the announcement of its establishment coincided with GE Aircraft Engines' efforts to convince the China Aviation Industry Corp. I (AVIC I) to integrate GE's CF34 engines with AVIC I's ARJ21 feeder-line planes that are now in research and development by AVIC I. On February 20, 2002 GE announcement in China that "We hope to team up with Chinese aviation firms to develop new products." GE announced the creation of its new R&D center one week later. Indeed, GE and AVIC I *have* teamed-up to produce major new products including a recent agreement to co-produce engines at AVIC I facilities in China for China's first "homegrown" commercial regional aircraft, the ARJ21-700.<sup>73</sup>

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<sup>72</sup>EE Times, "Taiwan component makers set up R&D in China," April 8, 2002.

<sup>73</sup>ChinaOnline, "GE eyes China's feeder-line market," February 21, 2002. See also, CCTV.com

**Aerospace:** The ARJ21 is AVIC I's 70-110 seat commercial turbofan jet now in final production. A maiden flight is scheduled for March 2008, with the plane due to go into mass production early in 2009 with deliveries to begin later that year. AVIC I already has received 71 orders for the new jet from Chinese airlines and is beginning a hard sell campaign throughout Asia. The engine and avionics of the ARJ21 were imported, although future engines will be co-produced with GE in China. All the other parts were designed and produced in China by AVIC I including, for the first time, the wings -- the largest and most complicated part.<sup>74</sup>

Bombardier of Canada, which is itself considering building part of its next line of aircraft in China, estimates that China would need 1,660 regional aircraft similar to the ARJ-21 over the next 20 years. Chinese authorities estimate that the ARJ-21 could take 60% of this domestic market. Such scale would have a significant impact on other markets for regional jets and there is every reason to believe this ambitious goal can be achieved. AVIC I recently assured a large core demand for the ARJ-21 by forming a joint venture with state-owned China Eastern Airlines, creating a regional airline based in western China. The airline will start operations in early 2008 with AVIC I's earlier, smaller MA60 aircraft and expects quickly to grow to 100 planes when the ARJ-21 becomes available. State-owned Air China, the world's largest carrier by market value, recently bought 10% of China Eastern shares. China's centralized, state-run aircraft purchasing and its authority over allocation for all the highly sought-after air routes for Chinese and TNC commercial airlines and cargo companies also affects aircraft purchasing decisions.<sup>75</sup>

Earlier this year, China became only the fourth country to disclose the successful development and deployment of its own advanced fighter jet. AVIC I's Jian-10, China's third generation fighter jet, uses almost entirely its own proprietary technology including fourth generation air-to-air missiles and a third generation Taihang turbofan engine -- now largely substituted with a Russian-built Russian AL-31FN engine.<sup>76</sup>

China's aviation industry is already large and fairly mature. As of early 2006, China's aviation industry reported having produced 16,000 military airplanes, nearly 60,000 engines and 20,000 missile for its armed forces. China is now one of the very few countries that is capable, largely independently, to develop and produce international-level fighters, bombers, pilotless aircraft, aerial refueling tankers, helicopters, new-type spacecraft and engines, air-to-air missile and other aeronautic equipment. China claims that "More than 90 percent of aeronautic equipment for Chinese army are developed independently, sources from China's two major aviation industry corporations said, according to Xinhua report."<sup>77</sup>

This success, the enormous scale of the potential market, and the enormous power of China's sovereign wealth fund to simply buy or buy-into successful operations -- or their competitors -- adds pressure on all non-Chinese producers. All major producers of aircraft and component parts now have significant and rapidly accelerating modern sourcing and R&D operations in China. Boeing and Airbus are particularly eager to stave-off, or to join, China's effort to develop its own large, two aisle commercial jet over the next 15 years. This explains

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"GE to build international R&D Center in Shanghai, February 28, 2002. "AVIC I, GE to co-produce engines for regional jets," *China Daily*, September 10, 2007.

<sup>74</sup> "China's own regional jet may have first foreign order," *China Daily*, September 21, 2007. "Jet set for test flights next March," *People's Daily*, March 8, 2007.

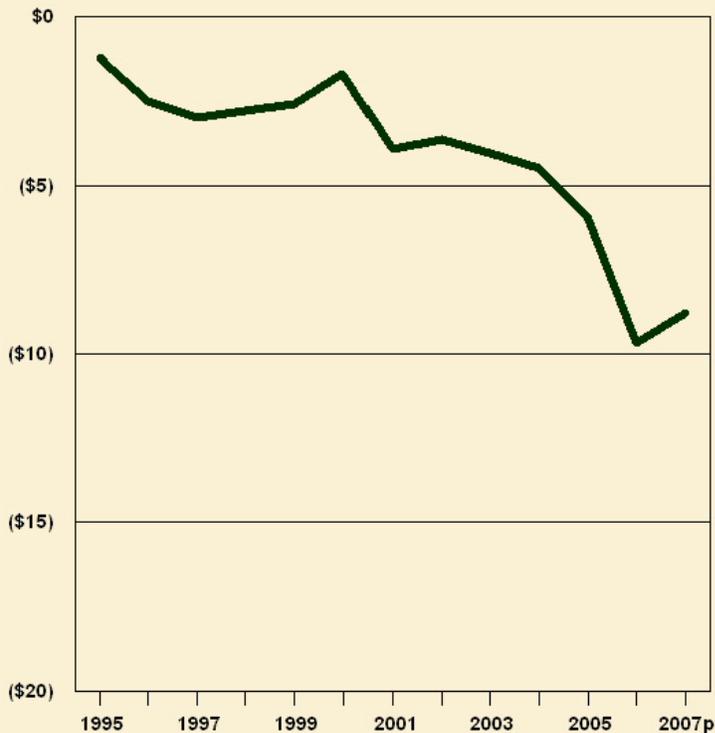
<sup>75</sup> Raphael Minder, "New plants in China vital for sales, says Airbus," *Financial Times*, September 5 2007. "Plane maker, airline float new carrier," *China Daily*, September 20, 2007.

<sup>76</sup> "China becomes world's 4th nation to develop advanced fighter planes," *China Daily*, 1-5-07.

<sup>77</sup> "90% of military aeronautic equipment developed independently," *China Daily*, 4-18-06.

### China's Global Aircraft and Parts Trade Aircraft, Spacecraft and Parts: HS 88

\$ Billions Each Year: China's Global Balance in Aircraft and Parts



China Customs, Global Trade Information Services and MBG Information Services

why despite more than a decade of very strong demand growth, China's global trade deficit for aircraft and component parts was never more than -\$6 billion until spiking to -\$9.6 billion in 2006. Through August 2007, that deficit is again being reduced.

Late in 2004, Airbus announced formation of an aircraft-engineering center in China, its first R&D center outside Europe and the United States. At the same time Airbus signed sole-sourcing contracts with AVIC I subsidiaries and announced that sourcing in China would rise sharply for new aircraft with the stated hope of increasing its share of China's civilian aircraft market. The R&D center opened in Beijing in July 2005 and in October 2006 it became a joint-venture with AVIC I and II formally taking a 30% interest in the financial risks and rewards. Days later, China's centralized, state-owned purchaser of civilian aircraft, the China

Aviation Supplies Import & Export Group Corp., CASGC, announced a "framework agreement" to purchase of 170 Airbus planes.<sup>78</sup>

Late in 2006, Airbus and AVIC I and II announced a joint "risk sharing" venture to create an Airbus assembly, flight testing and servicing operation in a new 2,300 sq-km economic zone near Tianjin. This is only Airbus' third assembly facility and first outside Europe. The massive operation requires first-tier contractors to transfer component parts and services production to China as compensation for the "shared risk," along with supporting technology and R&D. As industry experts David Pritchard and Alan MacPherson have pointed out, "There is no doubt that suppliers are expected to transfer technology to their Chinese outsourcing partner or offshore facility that will be utilized for China's mission to develop its own large commercial aircraft (twin-aisle)."<sup>79</sup> Airbus formally owns 51% of the venture which broke ground on May

<sup>78</sup> "Airbus announces first R&D center outside Europe and US," *Chinaonline*, 11-2-2004. In fact Airbus and AVIC I signed a technology "cooperation" agreement in 1999 that allowed Chinese engineers to participate in the R&D for the Airbus' A318. Clearly the trade-off was technology for sales. "China to buy 170 Airbus planes," *People's Daily*, 10-26-2006. "China to continue to do 5% of Airbus' outsourcing business for A350 planes," *China Daily*, 3-9-2007.

<sup>79</sup> David Pritchard and Alan MacPherson, "Strategic Destruction of the North American and European Commercial Aircraft Industry: Implications of the System Integration Business

15, 2007. A few weeks later, CASGC signed an order for 86 of the Airbus A320s that will be assembled and tested in Tianjin.<sup>80</sup>

But even this accelerating counter-trade of technology for orders has been transformed by Boeing's new model that Pritchard and MacPherson accurately describe as the "strategic destruction of the North American and European Commercial Aircraft Industry." Boeing's aggressive new model of outsourced "risk sharing" outsources even core technologies -- like wings -- and relies almost totally on presumed superior systems integration. That is, despite billions of dollars of federal and state subsidies, Boeing has outsourced over 90% of the design and production for its new 787. "For the first time in US commercial aviation history, foreign risk-sharing partners will have full control over the selection of second-and-third-tier suppliers... Boeing's partners in Japan and Italy will be building composite structures that include sophisticated sub-systems that are already certified, tested and ready for final assembly." AVIC I has the sole-source contract for horizontal stabilizers and other vital equipment.<sup>81</sup>

Boeing's new model does lower immediate costs which, like a "going out of business sale," does give Boeing some short-term benefits and forces Airbus to pursue similar practices. But, it fundamentally undermines core technologies and competencies and the invaluable supply-chain within the US and Europe while rapidly moving these to other parts of the world -- most particularly to China. As the low cost producer and most rapidly growing market, China has the money, the people and the desire rapidly to become a very significant force even in the sophisticated market for large commercial jets and their key components.

As with the aircraft industry, China's space industry also demonstrates rapid success and the effects of China's own science and engineering along with managed foreign investment focused on technology acquisition. China was only the third country to develop reconnaissance (so-called "spy") satellites a generation ago (after the US and the Soviet Union) and became the third country to successfully execute a manned space mission on October 15, 2003. A second, longer manned mission was successfully completed in 2005 and a third is planned for early 2008, possibly to include space walks by two astronauts. A lunar orbiter is set to be launched later this year with work well underway on a lunar rover and a hoped-for moon landing by 2012. China plans a joint mission with Russia to Mars in 2009. China's Long March series of rockets has now successfully launched 100 various types of communications, navigation and other types of commercial and military satellites. Work is well underway on a new series of rockets to increase the payload capacity to 25 tons from the current 9.5 tons.<sup>82</sup>

China's space program has had its share of setbacks, such as the failure of its SinoSat-2 communications satellite in October 2006, but has made remarkably rapid progress. Indeed, China's successful shoot-down of one of its own satellites early this year rattled the comfortable denials of many who ignore its many scientific achievements and raises important questions

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Model," Canada-United States Trade Center: Occasional Paper #35, January, 2007 p. 11.

<sup>80</sup> "Construction to start on Airbus A320 China assembly line," *China Daily*, May 15, 2007 and "Orders for 86 A320 aircraft confirmed," *China Daily*, June 29, 2006.

<sup>81</sup> Pritchard and MacPherson, op cit, page 5. and "\$300mln; a big order is signed in aviation industry," *China Daily*, August 10, 2007.

<sup>82</sup> An important description of China's use of partial access to its market as leverage for offsets, see Status Report of the Presidential Commission on Offsets in International Trade (Washington, DC: GPO, 2001) p. 64. "China's 1st lunar probe to be launched in latter 2007," *ChinaView*, May 20, 2007. "China to increase payload capacity of carrier rockets for lunar exploration," *China Daily*, June 18, 2007.

about conflicts of interest in TNCs charged with protecting vital US military satellites.<sup>83</sup> Although China scientists and engineers participates in “cooperative” international ventures when it helps them gain needed expertise, policy statements by China’s leadership constantly reiterate the determination that China develop and control its own independent technology.

The vital importance of aerospace is well understood in China. As Sun Laiyan, chief of the China National Space Administration recently explained: “Space technology reflects a nation's overall power and is an important facet of the modernization of national defense,” he said. Sun said China is able to research, produce and shoot ground-to-ground, air defense and coastal defense missiles, and its strategic nuclear deterrent is a key component of China's national defense.

“As late Chinese leader Deng Xiaoping pointed out, if China had no atomic bombs or hydrogen bombs and had not launched its first satellite since the 1960s, China could not be called an influential country and would not enjoy the same international status,” he said. Modern war relies heavily on information and high-tech, supported by space technologies, Sun said, citing the war in Afghanistan and Iraq where most intelligence gathering, military communications, navigation, positioning and weather reporting activities carried out for American troops have been conducted via satellites.<sup>84</sup>

**Automotive:** Directly accounting for 3.7% of GDP, the automotive industry is central to China’s industrial growth and by some measures it is the key driver. China auto output tripled since 2001, overtaking Germany in 2006 to become the world’s third largest producer after only the US and Japan, and passed Japan in auto sales to become the world’s second largest market after only the US. While auto and parts makers in the US and elsewhere struggle with production and sales stagnation auto production and sales have each grown by 46% per year from 2002 to 2006 and are now rising by 28%, with production set to reach near nine million in 2007.

China became a net exporter of new vehicles for the first time in 2005. Although still cautious and small-scale entering new markets, and with new restraints by China’s authorities to force industry consolidation and to control quality, auto exports from China are up 70% in 2007, expected to reach 500,000 units to a total of 177 countries. Half of the mostly very small companies that exported autos in 2006 were denied export licenses for 2007, forcing hundreds of them out of business or to be acquired. It is also important to note that China’s current exports represent less than 1% of the global market but that the 11th 5-Year Plan targeting auto exports to soar, capture 10% of the global market by 2010.<sup>85</sup>

Six year ago, poor supply-chain quality and limited availability was a key weakness and expense for China’s auto sector. This has changed dramatically with the major TNC producers’ increased outsourcing to China, “encouraging” their best parts suppliers to move production to China, and sharp increases in the scale and quality of China’s own parts producers. Of the world's top 100 auto parts suppliers, 70% have a presence in China. Policy guidance is driving a major consolidation effort but there are currently about 1,200 foreign-funded or jointly-invested parts manufacturers in China holding 50% the market. Among them are brands such as Delphi,

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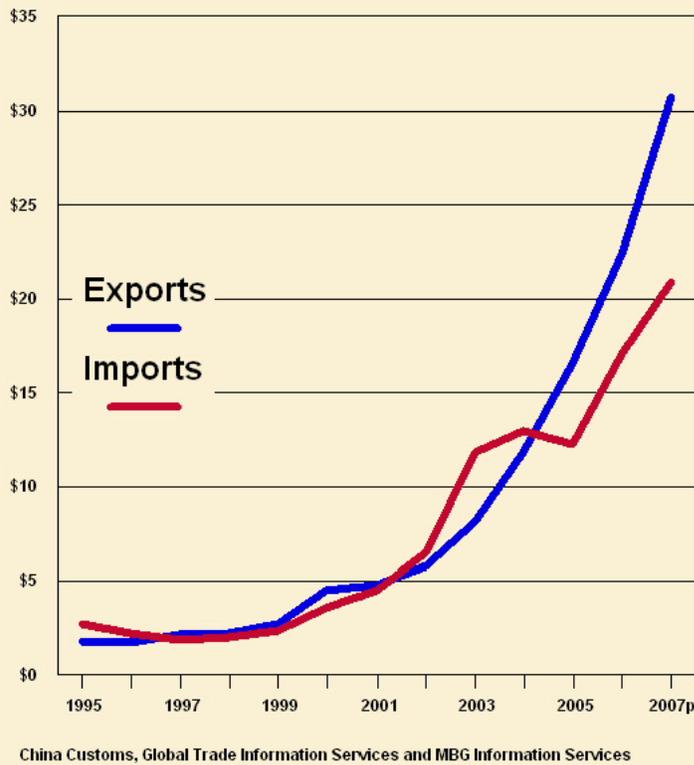
<sup>83</sup> Joseph Kahn, “China Confirms Test of Anti-Satellite Weapon,” *New York Times*, January 23, 2007. See for example, “Boeing offers jamming protection to satellite customers,” *China Daily*, February 27, 2007.

<sup>84</sup> “China's 1st lunar probe to be launched in latter 2007,” *ChinaView*, May 20, 2007.

<sup>85</sup> “China 2006-2010 five-year plan calls for 40% p.a. automotive production growth,” *South China Post*, 5-8-06. “China denies export licenses to hundreds of auto exporters,” 3-8-07.

### China's Global Vehicle Parts Trade Non-rail vehicle and parts: HS 87

\$ Billions Each Year: China's Global Exports and Imports



Bosch, Visteon and Wanxiang, China's largest maker of auto parts. There are about 5,000 large domestic spare parts manufacturers.<sup>86</sup>

Because of this, and high protective tariffs, auto parts production in China has grown even faster than has unit auto production with growth potential accelerating as efficiency and quality improves and prices decline by an average of -7% per year since 2002. A senior purchasing executive at Ford headquarters recently noted: "For the last five years, we've seen continuous improvement" in quality at Chinese parts makers. Ford's Chinese suppliers, he says, "are equal to those anywhere in the world."<sup>87</sup>

China auto parts industry is focused on import substitution in the fast-rising original equipment manufacturer (OEM) market. China's Association of Automobile Manufacturers set a target for the auto parts sector to increase gross sales to 1.2 Trillion yuan (\$154

billion) by 2010 with over 50% associated with OEMs, 15% to the replacement after-market and the rest to export. China passed Germany in 2006 to become the second largest exporter of auto parts to the US, after Japan. Worldwide parts exports from China are up 32% in 2007 and may reach \$14 billion for the year but, with strong and diverse government backing, export growth is expected to accelerate rapidly to reach \$55 billion in exports by 2010. China's first, government supported, annual International Auto Parts Expo will be held in Beijing beginning on November 29, 2007.<sup>88</sup>

If present trends continue, China could exceed the 12 million autos annually produced in Japan and the US to become the world's largest auto producer by 2009; almost certainly by 2010. Over the next five years, by 2012, China seems destined to become the overwhelmingly dominant producer and consumer of automobiles and light trucks. This rapidly increasing and

<sup>86</sup> "China's Emerging Car Industry," *Business Week*, April 12, 2007.

<sup>87</sup> Gordon Fairclough, "Chinese Auto-Parts Companies See Open Road at Home, Abroad," *The Wall Street Journal*, May 25, 2007. Gordon Fairclough, "China's Car-Price Wars Dent Profits," *Wall Street Journal*, September 8, 2007.

<sup>88</sup> "China outlines five-year program for auto parts," *China Daily*, January 29, 2007. "1st China International Auto Part Expo to be held in Beijing," MOFCOM press release, May 8, 2007.

### China's Global Vehicle Parts Trade Non-rail vehicle and parts: HS 87



massive scale of China's production and sales seems almost certain to have profound effects on auto producers -- and the overall economy -- in the US and worldwide.<sup>89</sup>

GM auto sales declined worldwide in 2006, particularly in North America where it is losing money, but sales of GM brands in China soared by 31.8%, increasing profits and its leading share to 11.8% of the fast-growing Chinese market. GM brands outpaced VW for the first time in 2005 to become China's top selling auto brand. GM's reported vital earning of \$306 million from its China operations in 2006, about the same as in 2005. Rich Wagoner, GM's president has referred to the "great gold rush" of automakers accelerating production in China since 2002. GM China's president and managing director Kevin Wale notes that GM is increasing investment in China by over \$1 billion in each of the next three years to maintain double-digit growth and, of course, to prevent

ceding market to rivals. Analysts such as Matthew Slaughter argue that production and sales in China hold the key to GM's renaissance.<sup>90</sup>

Ford, in even deeper troubles worldwide and in North America, enjoyed a surge of 86.6% in sales of its branded autos in China in 2006 before opening its second auto plant in China in September 2007. Ford's China president Cheng Meiwei has indicated that China would account for 50% of Ford's global market growth in coming years and that Ford considered China to be an important base for supply, research and development. Toyota reports that its brands increased by 68.0% in 2006, Volkswagen -- China's second leading brand -- reported an increase of 24.3% and BMW sales grew by 51.3%. Other foreign producers report similar strong results.<sup>91</sup>

But in China there is a very important distinction between brand and producer; no US, EU or Japanese auto producer has majority control of any production facility in China for local sales. That is, every auto producer in China is Chinese majority owned -- almost all by local,

<sup>89</sup> "China Would Become the World's Largest Automobile Producer by 2010," MOFCOM, quoting *Japanese Economic News*, July 16, 2007. "China expected to produce 8.5m autos in 2007," *China Daily*, September 22, 2007. "70% of Chinese auto exports go to Asia and Europe," *People's Daily*, August 14, 2007.

<sup>90</sup> Eric Baculinao, "Big Three place bets on China: Big Three poised to cash in on world's hottest car market," *NBC News*, January 12, 2007. Matthew J. Slaughter, "Let's Have a Real Debate on Globalization," *Wall Street Journal*, September 26, 2007.

<sup>91</sup> "Sales of foreign auto giants soar in China in 2006," *China Daily*, January 17, 2007.

state-controlled enterprises.<sup>92</sup> As a means of gaining access to world-class expertise and technology, China began allowing TNC investments to take up to just under a 50% stake in auto joint ventures in 1981 and frequently fine-tunes its guidelines to maximize benefits for its own, state-owned auto producers. The vital fact of TNC minority status is rarely mentioned in the US and thus is widely unknown. Indeed, even the Chinese media often obscure this fact by frequent reference to “foreign-invested” firms. “Foreign-invested” means only that foreign interests have some level of financial participation in the firm, usually but not always at least 10% -- in a country where the rights of minority shareholders are famously nonexistent.<sup>93</sup>

GM’s majority partner in China is government owned Shanghai Automotive Industrial Corporation (SAIC,) the country’s largest with total 2006 auto production of 1.6 million units. SAIC has majority control of GM’s two joint ventures (one also includes participation by Wuling Motors,) producing Buicks, Chevrolets, Cadillacs and other models including the Wuling mini-van. SAIC also has majority control of one of Volkswagon’s two ventures in China. SAIC also acquired all of the intellectual property for the Rover 75 from now-bankrupt UK auto giant MG-Rover. In late 2006, SAIC’s independent operations, separate from its joint ventures with GM or Volkswagon, but using the expertise -- and many of the same engineers -- from two decades of top-level TNC collaboration, introduced its first own-branded, highly regarded sedan, the Roewe 750. GM and SAIC are currently locked in a heated battle over the scope of independent work in their now decade-old R&D partnership, the Pan Asia Technical Automotive Center (PATAC) and its relationship to SAIC’s own, independent R&D operation, the Automotive Engineering Academy of SAIC.<sup>94</sup>

SAIC is developing its new “global Chinese brand” methodically, planning to introduce a new model every year for the next five years, building a range of cars from subcompacts to SUVs while ramping up production. Also, with the strong urging of China’s MOFCOM, earlier this year SAIC signed a memorandum of understanding with China’s oldest auto maker, the state-owned Nanjing Automobile. This MOU is expected to result either in an acquisition by SAIC or very close collaboration on own-branded vehicles. Nanjing Automobile acquired the bankrupt MG-Rover and is attempting to revive the MG sports car brand as its own. Nanjing Auto is again producing the MG in Birmingham England and at its headquarters in Nanjing.<sup>95</sup>

China’s second largest auto producer, government owned First Auto Works (FAW) also controls a joint venture with Volkswagon and other joint ventures with Toyota and Mazda. Ford’s joint ventures are majority controlled by state-owned Chongqing Changan Automobile Company which also owns joint ventures with Suzuki Motor Corporation. Nissan, Honda, and

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<sup>92</sup> Honda produces the “Jazz” in Guangzhou’s export zone exclusively for export to Europe and Southeast Asia, controlling 65% of the operation with partners Dongfeng Motor and Guangzhou Auto Group. There are a few, mostly very small auto companies privately Chinese owned, with the one large exception, Geely. See, “You drive a what?” *Business Week*, January 6, 2006.

<sup>93</sup> See for example of ignoring minority status, Rebecca Blumenstein, “Ford Opens 2nd Chinese Assembly Plant,” *Washington Post*, September 25, 2007. For a summary of the auto sector goals in the 10th 5-Yr Plan for 2000-2005 see, “China auto industry wants more mileage out of foreign investment,” *ChinaOnline*, June 9, 2000.

<sup>94</sup> “SAIC Wants More Rights In China R&D, But GM Thinks Differently,” *Theautochannel.com*, August 21, 2007.

<sup>95</sup> Gordon Fairclough, “GM’s Chinese Partner Looms as a New Rival,” *TheWall Street Journal*, April 20, 2007. Mure Dickie, “Chinese carmakers moot merger,” *Financial Times*, July 30, 2007. “Nanjing Auto plans to ship MG 7 in bid to revive brand,” *Shanghai Daily*, June 25, 2007.

Peugeot are produced in joint ventures controlled by state owned Dongfeng Motor Corporation. BMW's are made in a joint venture controlled by state owned Brilliance Auto Company and Daimler vehicles are produced in a joint venture controlled by state owned Beijing Automotive Industry Holding Company, BAIC. Each of these large, well-experienced, deep-pocketed and technically sophisticated state owned, majority partners to the world's top TNC auto makers now have separate, independent operations developing their own branded range of world-class vehicles. China's ten largest auto-makers now account for 83% of production with domestic brands surging to capture 30% of all vehicles, 41.5% of all passenger car sales in 2006.<sup>96</sup>

Total profits for China's automakers rose 65.8% in the first half of 2007 to 30.2 billion yuan, \$3.98 billion, on a 26.6% jump in revenues to 486.4 billion yuan. China's top three producers each had revenues of over 80 billion yuan (\$10.5 billion) in the first six months of the year. All are making very substantial investments to develop their own independent brands.<sup>97</sup>

Currently, China's largest own-brand automobile company -- and seventh largest producer -- is state-owned Chery, an upstart that produced almost no cars before 2001. Chery now has an annual production capacity of 650,000 cars with seven foreign abroad and plans for seven more within three years. Chery provides Fiat with 100,000 engines per year and has controlling interest in a new joint venture with Fiat that is building capacity for 175,000 more units of Chery's own brand together with Fiats and Alfa Romeos. It also has majority control over another new joint venture with Chrysler to build a 150,000 small cars per year, upgrading a current Chery model but with Chrysler brands for export to the EU and, for the first time in China, to the US. The agreement transfers state-of-the-art product and process technology to Chery along with new expertise in every aspect of the auto industry, from design and engineering to logistics, finance and marketing. It also allows Chery access to Chrysler distribution network for its own branded models.<sup>98</sup>

Soon after being admitted to the WTO, China's rapid success in gaining *access* to world-class automotive technology through joint-ventures, led its authorities to seek technology *ownership*. In April 2003, China's authorities proposed a draft auto policy that required 50% of all vehicles sold in China by 2010 be produced by Chinese companies with full ownership of the intellectual property rights. This policy was not adopted but rather industrial policies were put in place in June 2004 to begin consolidation of China's more than 100 automakers into a dozen groups. These large auto groups are now required to develop their own brands and design their own cars and engines by the end of 2010.<sup>99</sup> Rather than mandating ownership of intellectual

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<sup>96</sup> There have been many large problems along the way in China's drive to develop and brand their own vehicles. Recently, Brilliance Auto was humiliated by an unsafe rating in a German collision test. But the immediate response with major engineering improvements and a public relations offensive that left industry observers impressed. Gail Edmonson, "China's Brilliance: Back from Disaster? BMW's Chinese partner, aiming to compete in Europe and the US, could rebound from devastating safety tests faster than anyone expects," *Business Week*, 9-14-07. "China becomes 2nd largest market for new cars," *Chinaview*, January 11, 2007. "China's auto output, sales soar in 1st half of 2007," *China Daily*, July 11, 2007

<sup>97</sup> "Chinese automakers report 60% rise in first-half profits," *China Daily*, August 20, 2007.

<sup>98</sup> "Chery to boost foreign plants," *China Daily*, August 23, 2007. Rich Blanchard, "Chery-Chrysler deal to get OK," *Detroit News*, July 3, 2007.

<sup>99</sup> Jane Lanhee Lee, "China Seeks Formation Of Large Auto Groups," *The Wall Street Journal*, May 27, 2004. Makiko Kitamura, "Horiba, Essential to Toyota, Plans Growth in China," *Bloomberg*, April 6, 2007.

property, since 2004 China requires that each new auto production facility be accompanied by a new or expanded R&D center.<sup>100</sup>

The auto industry is an especially important example of China's successful industrial policies, of the evolving nature of TNCs' joint venture operations in China, and to anticipate developments over the next few years. Analysts who believed that China's industrial policies would hinder its development while "free" trade policies in the US would reinvigorate the US economy were wrong. The global US trade deficit -- production shortfall -- for autos/trucks and parts reached a new record -\$144.7 billion in 2006 with \$2.33 in imports for each \$1.00 of exports. Leading auto TNCs entered into minority joint ventures with China's inefficient, state-owned firms confident their vastly superior technological, managerial and financial expertise would control the venture while gaining in-country experience to soon allow them independently to dominate the China market. However, today, it is China's major state-owned auto firms that have prospered while the TNCs face difficult times. And China's highly profitable auto firms are only now beginning to tap bond and equity markets. There can be little doubt but that China's auto makers are now the overwhelmingly dominant partner in each joint venture with each minority partner TNC now pressed to demonstrate their ongoing value to the venture.

Similar, rapid changes are occurring throughout China's economy in joint ventures between large, state-owned enterprises and major TNCs. Perhaps the most important appears to be within banking and financial services where TNCs are limited to 20% participation in existing operations and 33% even when they help establish new ventures. Nonetheless, the world's major financial institutions have been quite eager to take small minority stakes in recent years. As in the auto sector, major financial TNCs expected to use minority footholds to gain experience and to enter a lucrative market. However, they now find they have created increasingly powerful state-owned competitors and continue to be largely excluded from -- or consigned to a support role in -- China's booming equities market and other activities. Financial TNCs are currently reporting significant earnings on their minority Chinese operations but only as a reflection of the far greater earnings of their controlling Chinese partners. This is a very important area that urgently needs the attention of policy makers. As with the auto market, China's leadership has set its sights on creating the world's largest capital markets and assuring that market -- and perhaps world markets -- is dominated by Chinese firms.<sup>101</sup>

Increasingly, major TNCs are trapped between relentless global markets and China's powerful industrial policies, offering the choice only in the pace of the TNCs' lost dominance.

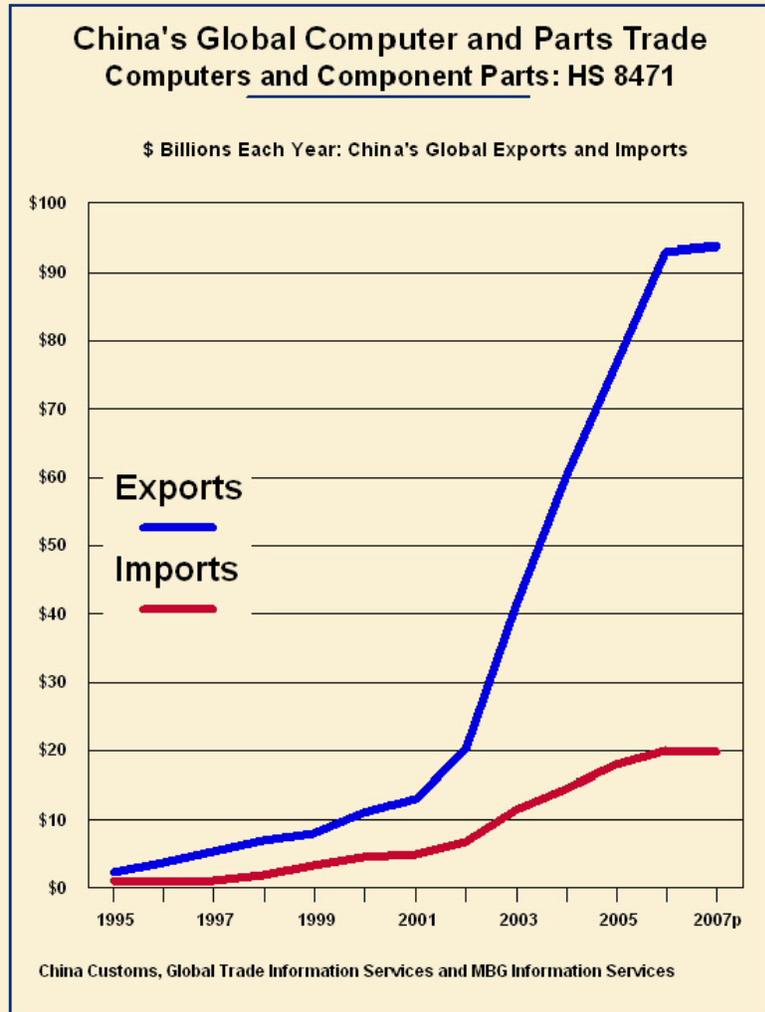
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<sup>100</sup>"Sales of foreign auto giants soar in China in 2006," Ministry of Commerce, January 17, 2007. The R&D requirement in 2004 was a concession by the Chinese from draft proposals to require that Chinese companies own the technology in 50% of cars sold by 2010. This could well still be the goal but it is pursued by less overt means: "Threat of technology rip-off won't slow GM in China; Automaker stays in hot market despite possible patent loss," *Automotive News*, David Sedgwick, June 16, 2003. The new policy "China issues new auto rules," is on the website of The Embassy of the Peoples' Republic of China in the United States of America, March 6, 2004.

<sup>101</sup> Geoff Dyer in Shanghai and Sundeep Tucker, "China to ease securities tie-up rules," *Financial Times*, September 23, 2007. Even when firms manage to gain access, as Goldman Sachs has done, they now face increased risk of their stars joining domestic firms or starting their own operation. See Sundeep Tucker and Jamil Anderlini, "Goldman's China rainmaker goes solo," *Financial Times*, September 18, 2007. "Chinese capital market to become world's best market," *Chinanews*, March 1, 2007. "Central bank urges State-owned commercial bank reform," *China Daily*, August 28, 2007.

## China's Advanced Technologies Trade:

According to the National Development and Reform Commission, in 2006, the total revenue from China's high tech industry exceeded 5.3 trillion yuan, \$706 billion, with its added-value contributing 8% of GDP. High tech exports stood at \$281.5 billion in 2006, more than four



times its total in 2002, and almost one-third of China's total export earnings. The Commission estimates that high tech revenues will reach 6.3 trillion yuan in 2007 with \$350 billion in exports. For computers and computer parts, *despite double-digit growth in domestic demand*, China's global ratio of exports to imports soared from 2.4-to-1 in 2000 to 4.7-to-1 in 2006 and 2007.<sup>102</sup>

China's modernization efforts began focusing on the production of computers and other advanced technology products with its Eighth 5-Year Development plan that started in 1990. By 1995 China's slight computer production had grown rapidly, equal to that of Thailand. In 2000, China's computer production had surpassed that of all European countries and trailing only the US, Japan and Singapore.<sup>103</sup> Despite constant complaints about the lack of intellectual property rights enforcement, I forecast in 2002

that China's computer production would soon surpass that of Japan and could even surpass the US in 2005 or 2006. In fact, with little progress toward IPR protections, China surpassed US computer production in 2004 and has since soared to dominate the world's computer market.<sup>104</sup>

<sup>102</sup> "China welcomes foreign investment in hi-tech industry," *China Daily*, September 27, 2007.

<sup>103</sup> Kenneth L. Kraemer and Jason Dedrick, Asia's Computer Challenge: Threat or Opportunity for the United States and the World? (New York: Oxford University Press, 1998) and Enter the Dragon: China's Computer Industry (Irvine, CA: Center for Research on Information Technologies and Organizations, 2002.), p. 33.

<sup>104</sup> McMillion, "China's Very Rapid..." p. 1; I again rely heavily on the careful research on the global computer industry by Jason Dedrick and Kenneth L. Kraemer. See their recent "Is Production Pulling Knowledge Work to China? A Study of the Notebook PC Industry," in *Computer*; published by the IEEE Computer Society, July 2006; pp. 36-42.

### China's Global Computer and Parts Trade Computers and Component Parts: HS 8471

\$ Billions Each Year: China's Global Balance in Computers and Parts



China Customs, Global Trade Information Services and MBG Information Services

The purchase of IBM's personal computer division by state-controlled Lenovo for \$1.75 billion in December 2004 signaled an important new phase in China's commercial and technological advancement. Although Lenovo's acquisition included rights to use the famous IBM name, it was immediately discarded as Lenovo sought to quickly establish its own brand. It was a major sponsor of the Winter Olympics in Turin Italy in December 2006 and will be an even larger presence in the 2008 Beijing Olympics.<sup>105</sup>

Lenovo received much criticism before and after the IBM purchase but its share of China's market grew from 27% when it acquired IBM to 36% now. After a period of adjustment, Lenovo report 13% revenue growth in FY2007 and sharply rebounding profits of \$161 million.<sup>106</sup> Its global market share rose to 8.3% in 2007-Q1 from 7.6% in 2006-QIV.<sup>107</sup>

The world's other leading computer makers, Dell, Hewlett Packard and Acer, are also accelerating their investments in China, helping to attract the world's largest concentration of information technology hardware production. IT producers are concentrated within three coastal regions of the Yangtze River Delta, the Pearl River Delta and Bohai Bay, accounts for more than 80% of China's industry total and creating a powerful magnet for producers of upstream and downstream goods and services. Over the past five years, this clustering has created a uniquely strong and dynamic supply chain of virtually all of the world's leading TNCs and Chinese firms of rapidly increasing quality.

Although China is the world's largest producer of semiconductors, this is the one key component of IT where TNC producers continue to dominate. This is a matter of considerable concern to China's authorities who worry about the security of data when using foreign-made semiconductors and, as with all other foreign-patented products, they resent the payment of high prices or royalty fees. Price and fee negotiations between Chinese authorities and foreign

<sup>105</sup> Lenovo changed its name from Legend in early 2004. Glenn Rifkin and Jenna Smith, "Quickly Erasing 'I' and 'B' and 'M'," *New York Times*, April 12, 2006.

<sup>106</sup> Tom Mitchellin, "Lenovo's results confirm turnaround success," *Financial Times*, 8-3-07.

<sup>107</sup> Charles Hutzler, "Computer Maker's Woes Reflect the Heat Felt By China Manufacturers," *Wall Street Journal*, June 28, 2004. "Lenovo Expects To Sustain Pft Growth, Focus On 4Areas," *Dow Jones Newswire*, 8-23-07.

producers of semiconductors and other patented products is a key area needing more research. But security concerns -- fear of hidden “back doors” -- in semiconductors, software and other technology products assures that China, like the US, will focus very major attention on the development of independent technologies.

The accelerating concentration of producers that incorporate semiconductors in their products now in China puts increasing pressure on the IC industry to locate in China for proximity to its customers. This gives China’s authorities ever-greater leverage on TNCs in demanding more modern product and process technologies and other concessions. All of the major chip producers have operations in China and most are expanding aggressively as are China’s own domestic firms. AMD’s expansion of production and sales has been particularly impressive, raising its share of microprocessor sales in China from inconsequential in 2002 to 25% of the total market and near 50% of the retail market.<sup>108</sup>

Another source of competitive pressures is that China’s Institute for Computer Technology developed China’s first own-technology central processing unit, the Loongson or “Dragon Chip” in 2002. The latest form of this chip, said to have approximately the capabilities of an Intel Pentium IV, is about to go into mass production by STMicroelectronics, one of the worlds largest semiconductor manufacturers. ST bought the production and marketing rights for 30 billion yuan earlier this year and will pay royalties to the Institute for each CPU sold as the Institute works to develop its next generation product.<sup>109</sup> At the same time, Beijing University’s Micro-Processor Research and Development Center recently announced a breakthrough in the basic X86 semiconductor design technology used in most personal computers. The University’s technology companies hope to begin producing ultra mobile computers using the new processor as early as 2008.<sup>110</sup>

Intel recently bent to the combined pressures and appeals of China’s IT supply chain and other considerations. Construction is now underway for Intel’s first 300-mm wafer fabrication facility in Asia. The \$2.5 billion plant, named Fab 68, is located in a new technology zone just north of Dalian, a fast-growing northeastern port city outside the main IT production centers and without abundant water supplies. (Dalian was, however, the site of the “Summer Davos” in September 2007; the first of what is now scheduled to be an annual gathering of the world’s business leaders.) Most IC production and support is now in Pudong New Area in Shanghai but China’s 11th Five-Year plan provides policies to disperse technology and industrial activities to other regions. The Intel facility will be 100% Intel controlled and will not include production of Intel’s core microprocessor. Nonetheless, it represents a major import substitution step up the technology value chain for China’s IT production and a strong new magnet and incubator for suppliers of IT goods and services in Dalian’s new, 55 km. sq. development zone.<sup>111</sup>

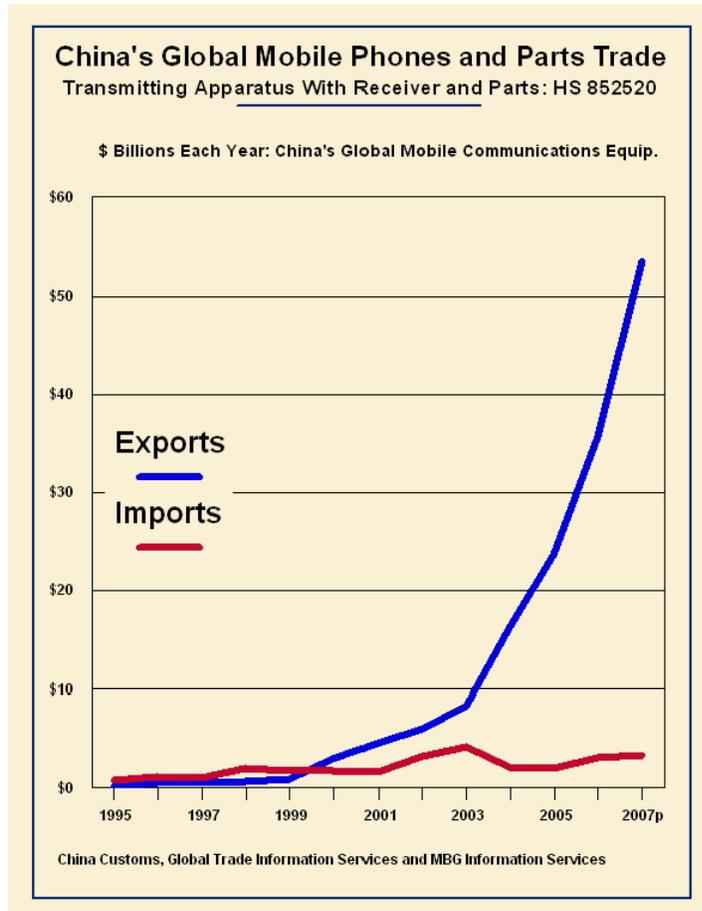
But the most far-reaching technology issue in China today is the apparently imminent launch of China’s long-delayed, government-owned independent standard for third generation mobile communications, TD-SCDMA. China now accounts for almost half of all mobile communication devices produced worldwide with a global trade surplus that has skyrocketed in the past four years and may approach \$50 billion in 2007. However, driven by security and cost

<sup>108</sup> “US Chipmaker AMD sets store by country,” *China Daily*, June 28, 2007. “AMD eats into Intel’s market share in China,” *China Daily*, September 6, 2007.

<sup>109</sup> Peter Clarke, “Intel and the need to be loved by China,” *EETimes*, March 30, 2007.

<sup>110</sup> “China grasps x86 microprocessor design technology,” *People’s Daily*, July 9, 2007.

<sup>111</sup> “China approves Intel chip factory,” by Don Lee, *Los Angeles Times*, March 14, 2007. “China inaugurates free-trade harbor area in Dalian,” *China Daily*, June 29, 2007.



concerns, China's leadership has poured significant resources into developing a proprietary standard since 1999 to provide an independent alternative to the "US" CDMA standard or the "European" GSM standard.

Co-developed for China by Siemens and a group of state-owned, research-oriented companies assembled by the Ministry of Information in 1999 and named the Datang Group, TD-SCDMA was certified as a third global communications standard by the International Telecommunications Union in May 2000. China has drawn most of the world's leading telecom firms into the effort for its commercialization. It's imminent launch has been announced repeatedly since early 2003 but has been delayed by one problem after another. However, the last significant problem (handoffs to/from other standards) was recently resolved and TD-SCDMA appears finally to be ready for launch by early 2008.<sup>112</sup>

China's regulators have refused to issue 3G licenses for any of the three standards until TD-SCDMA is launched. Indeed, in what some call a shadow roll out, Datang and the world's largest mobile service provider, state-owned China Mobile -- are building-up their infrastructure while conducting extensive trials in 10 major cities including all six of the host cities for Beijing's August 2008 Olympics. Datang received a \$3.6 billion loan from China Development Bank and China Mobile has issued initial equipment procurement offers worth 26.7 billion yuan and another six billion yuan for handset procurement.

Industry analysts expect 140 million mobile handsets will be sold in China in 2008 and that as many as 50 million of these may support China's proprietary standard. All of the leading TNC handset producers are supporting TD-SCDMA along with one or more of the established standards. But the now widely expected success for China's mobile state-owned, proprietary standard of mobile communications could have far-reaching consequences. It would certainly give an immediate major boost to China's domestic handset producers and adversely affect the US and European producers and standards worldwide and it could easily have profound effects on the wider information technology sector.<sup>113</sup>

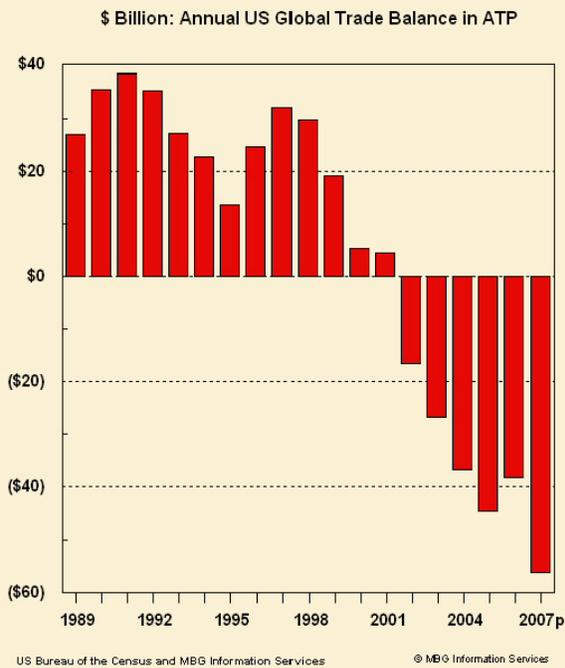
China is attempting to develop technical standards in many areas but none is nearly so important as TD-SCDMA. This is a vitally important matter for US economic and military security that deserves close attention.

<sup>112</sup> "First TD-SCDMA/GSM/GPRS/EDGE Automatic Handover Achieved by T3G and NXP," *NXP Newswire*, June 6, 2007.

<sup>113</sup> "China's Datang secures funds to build 3G networks," *China Daily*, June 21, 2007. "China Mobile asks suppliers to submit informal bids," *China Daily*, March 2, 2007.

### US Trade in Advanced Technology Goods

ATP Losses Now Much Larger Than Any Past Surplus



Perhaps the best measure of China's pervasive success in modernizing its production is demonstrated by its affect on US trade in Advanced Technology Products. ATP trade was one of the few remaining areas of US manufactured goods surpluses amid the chronic US trade deficits that first began in 1982.

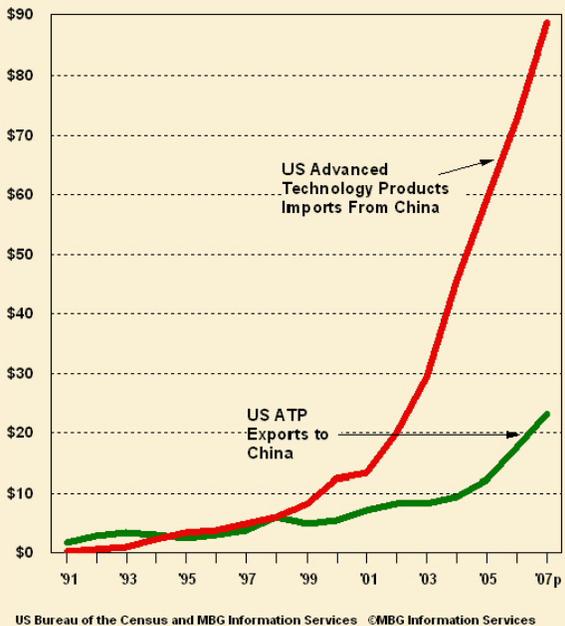
Through the 1980s and 1990s, ATP surpluses were sighted by theorists claiming that importing what others produce more cheaply allows a country to concentrate on what it makes best, the sales of which will pay for imports and raise living standards for all. The hope was that ATP surpluses would eventually pay for a significant share of the US net imports of oil, apparel, autos and other products of mature manufacturing industries. In the event, the US began facing deficits in ATP trade with China in 1995 and the US has faced global ATP deficits since 2002.

Indeed, since 2004 US deficits -- net payments -- for manufactured ATP have been larger than the entire US surplus from all so-called Intellectual Property fees and royalties. *That is, since 2004, the US has faced a combined deficit in technology goods AND services.* These deficits remain relatively small -- perhaps a new record of -\$17 billion in 2007 -- but they represent a sea change from just a few years ago.

In my report to the Commission five years ago I projected that annual US exports to China of Advanced Technology Products might reach only about \$23 billion by 2007. My most aggressive scenario saw China's ATP exports to the US accelerating to as much as \$82 billion in 2007 -- almost four times ATP exports -- leaving the US with a then unimaginably large -\$59 billion deficit. In fact, US exports of ATP grew as expected but imports from China grew even more than in the most aggressive scenario. As a result, the US ATP deficit with China reached -\$55.1 billion in 2006 and is on track to reach about -\$66 billion in 2007. Whereas six years ago

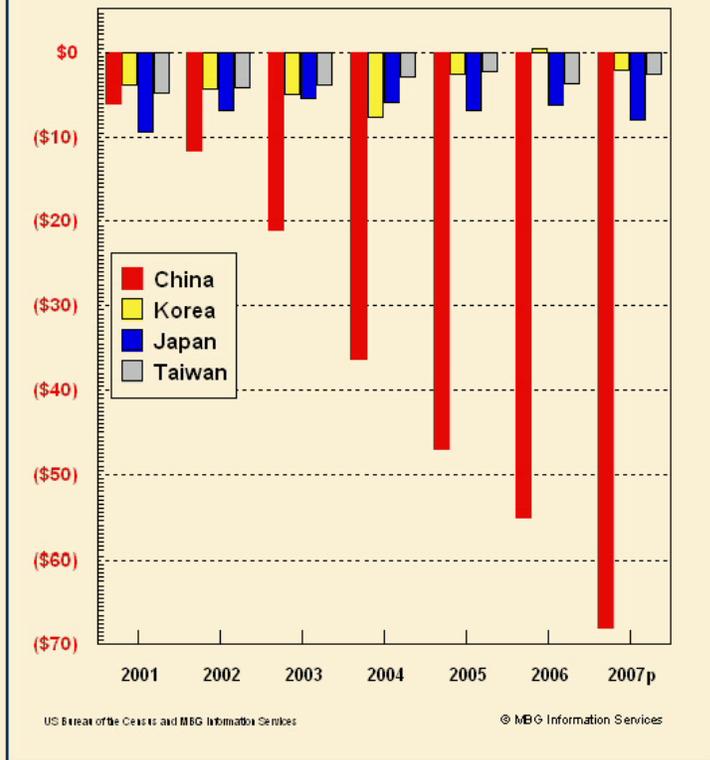
### US Advanced Tech Trade With China

\$ Billion US ATP Exports and Imports With China



**China is the Dominant Source of new US Tech Deficit**  
**US ATP Deficit with China Now Nine Times The Deficit With Japan**

\$Billions: US Trade Deficit in ATP With Key Asian Countries



the US ATP deficit with China was not yet markedly worse than with other countries-- the US deficit with Japan was worse -- today the China deficit is nine times worse than with Japan and accounts for more than the entire US global ATP deficit.<sup>114</sup>

The global US ATP deficit in 2006 was -\$38.3 billion and the global surplus for IP earnings was \$35.9 billion. The 2007 US global ATP deficit is on track to set another record of about -\$56 billion and the IP surplus also a record of about \$43 billion.

While the US ATP deficit with China was -\$55.1 billion in 2006 the IP surplus with China was just \$1.4 billion. That is, the 2006 US deficit with China in advanced technology goods *and* services was -\$53.7 billion; just more than -\$1 billion per week. For 2007, the US' IP surplus with China looks set to grow -- aided by a slightly weaker exchange rate -- to \$1.7 billion which, when combined with the

projected -\$66 billion in ATP leaves a US advanced tech deficit with China of -\$64 billion.<sup>115</sup>

<sup>114</sup> "China's Very Rapid..." op cit, pp. 17-18. About 700 of some 25,000 commodity classification codes used in reporting US merchandise trade are identified as "advanced technology" codes and they meet the following criteria:

1. The code contains products whose technology is from a recognized high technology field (e.g., biotechnology).
2. These products represent leading edge technology in that field.
3. Such products constitute a significant part of all items covered in the selected classification code.

The aggregation of the goods results in a measure of advanced technology trade which appears in Exhibit 16 (of each monthly trade data release.) This product and commodity-based measure of advanced technology differs from broader NAICS industry-based measures which include all goods produced by a particular industry group, regardless of the level of technology embodied in the goods. From the methodology section "Information on Goods and Services," of US International Trade in Goods and Services, (publication FT 900) published monthly by the US Department of Commerce, Bureau of Economic Analysis and the Bureau of the Census. p. 27.

<sup>115</sup> Jennifer Koncz, Michael Mann, and Erin Nephew, "US International Services," *Survey of Current Business* of the US Department of Commerce, October 2006. pp. 18-74.

As discussed above, over the past six years more than the entire annual decline in the US ATP balance with China is due to sharp declines in electrical and non-electrical machinery, Harmonized Industrial Code Series (HS) 84 and 85. These industries include computers and parts along with mobile communications devices and semiconductors, but also jet engines and machine tools. However, already by 2001, ATP deficits with China had spread to a majority of tech products with the overall China deficit -\$6.1 billion. Of the 599 ATP products traded with China in 2001, the US had a surplus in 287 and a deficit in 312 -- 52%. As the deficit with China has soared, these deficits have spread to 361 (57%) of the 637 ATP products traded in 2006.<sup>116</sup> A detailed list of all ATP industries, HS codes, exports, imports and balances with China is available in the Appendix.

I regret that the scope of this report does not allow me to discuss the equally dramatic changes occurring in China's services sectors, particularly in its professional services. These are the areas that China's 11th Five-Year Development Plan targets for the first time to receive priority financial and strategic policy support.

<b>China's Global Current Account Balances</b>					
<b>\$ Millions Each Year: Near \$1 Trillion of Surpluses since 2001</b>					
	<b>Goods</b>	<b>Services</b>	<b>Investments</b>	<b>Transfers</b>	<b>Current Account</b>
1999	\$35,982	(\$5,341)	(\$14,470)	\$4,944	\$21,115
2000	34,474	(5,600)	(14,666)	6,311	20,519
2001	34,017	(5,933)	(19,175)	8,492	17,401
2002	44,167	(6,784)	(14,946)	12,984	35,422
2003	44,652	(8,573)	(7,838)	17,634	45,875
2004	58,982	(9,699)	(3,523)	22,898	68,659
2005	134,189	(9,391)	10,635	25,386	160,818
2006	217,746	(8,834)	11,755	29,199	249,866
2007p	370,000	(8,500)	18,000	32,000	411,500

International Monetary Fund and MBG Information Services

However, quite important for future prospects, it should be understood that it is not only China's annual trade surplus that is advancing rapidly. China's annual global balance on investment income and global transfers is also surging; from a combined deficit of -\$10.7 billion in 2001 to a combined surplus of \$41.0 billion in 2006 and a likely surplus of at least \$50 billion in 2007. That is, beginning in 2005 China started earned more on its foreign lending and investing than all the earnings of all TNCs and other foreign interests operating and investing in China. Also important, net transfers of income to China have soared from \$8.5 billion in 2001 to \$29.2 billion in 2006 and may reach \$32 billion in 2007. This massive flow of capital is from overseas

<sup>116</sup> An August 2007 "Info Brief" on ATP trade from the National Science Foundation has numerous and serious data errors in reporting the Census trade figures. Lawrence M. Rausch and Derek Hill, "Annual Deficits Continue for US Trade in Advanced Technology Products," *Info Brief: Science Resources Statistics*, NSF-07-329, August 2007.

Chinese seeking to invest in China and earnings from China's substantial overseas workforce. This investment and transfer surplus seems certain to continue its rapidly increase now in the same way that the annual surplus on Japan's net investments reached \$125 billion in 2006 and could reach \$150 billion in 2007.

<b>U.S. Current Account Balances With China</b>					
<b>\$ Millions Each Year: Near -\$1.3 Trillion in Deficits since 2001</b>					
	<b>Goods</b>	<b>Services</b>	<b>Investments</b>	<b>Transfers</b>	<b>Current Account</b>
1999	(\$68,793)	\$1,334	(\$4,120)	(\$1,164)	(\$72,743)
2000	(83,971)	1,946	(4,718)	(1,300)	(88,043)
2001	(83,295)	2,005	(5,993)	(1,374)	(88,657)
2002	(103,276)	1,888	(6,984)	(1,523)	(109,894)
2003	(124,384)	2,038	(8,067)	(1,399)	(131,812)
2004	(162,335)	1,783	(10,253)	(1,769)	(172,574)
2005	(202,087)	2,437	(17,106)	(1,851)	(218,607)
2006	(233,087)	3,639	(26,695)	(2,065)	(258,207)
2007p	(279,819)	4,673	(42,572)	(2,125)	(319,843)
<b>US Department of Commerce and MBG Information Services</b>					

Although China also enjoys a large trade and Current Account surplus with the EU and smaller surpluses with Japan, its surpluses with the US continued to be larger than its global surpluses until 2007. That is, China has very large net imports from (trade deficits with) Taiwan, most of its other Asian neighbors and most resource-rich developing countries. China has developed a vital role for itself -- and enormous leverage for commercial and political negotiations -- as an essential hub for much of the world's dynamic global network of goods production.

The US Current Account deficit with China in 2006 was -\$258.2 billion including deficits of -\$233.1 billion for increasingly sophisticated goods and -\$26.7 billion on investments. That is, the US paid \$26.7 billion more to service its debts with China and in profits for other Chinese interests in the US, than all profits earned by all US TNCs and other interests in China. These annual US net payments on investments to China may rise to over \$42 billion in 2007 from less than \$6 billion in 2001. This means that even if China manages to restrain its soaring trade surplus with the US and with the world, its Current Account surplus is likely to remain very substantial and, indeed, may continue to rise rapidly for several more years. This means that China's \$1.4 Trillion in foreign currency reserves will continue increasing rapidly and, unchecked, the ability of China's authorities to buy or negotiate core global competencies will continue to accelerate.

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# **Appendix**

**A complete list of all imports, exports and balances  
in US-China trade  
of Advanced Technology Products:  
2000 to 2006**

US Exports of Advanced Technology Products to China

HS Code	Commodity Description	2000	2001	2002	2003	2004	2005	2006
	<b>Totals</b>	\$5,524,491,352	\$7,243,384,280	\$8,288,062,990	\$8,287,626,311	\$9,433,134,900	\$12,289,337,013	\$17,627,164,169
2844200020	URANIUM FLUORIDE ENRICHED IN U235	0	0	0	0	0	0	0
2844302060	URANIUM COMPOUNDS DEPLETED IN U235, NESOI	0	52,378	72,700	35,160	11,120	162,316	193,785
2844305000	MIXTURES CONTAIN URANIUM DEPLETED IN U235, NESOI	0	0	0	0	25,999	42,796	527,369
2844400010	ELEMENTS, ISOTOPES AND COMPOUNDS WITH COBALT-60 RA	2,755	53,712	2,766	25,130	709,666	899,868	198,073
2844400020	RADIOACTIVE ELEMENTS, ISOTOPES AND COMPOUNDS OTHER	1,703,156	1,026,611	3,524,522	2,494,778	1,607,964	1,403,607	1,432,590
2844400050	ALLOYS, DISPERSIONS, CERAMIC PRODUCTS & MIXTURES C	242,996	401,549	301,354	150,148	169,598	393,775	317,063
2845900000	ISOTOPES, EXCEPT THOSE OF HDG 2844; COMPOUNDS, INO	145,406	329,965	115,929	312,931	716,773	537,715	1,248,880
2914692000	QUINONE DRUGS	0	29,700	29,386	27,427	72,899	3,750	418,238
2918903000	AROMATIC DRUGS	0	0	0	0	0	0	0
2921460000	AMFETAMINE, BENZFETAMINE(INN) ETC & SALTS THEREOF	0	0	0	0	0	0	2,961
2921494300	AROMATIC MONOAMINE DRUGS, NESOI	0	0	0	0	0	0	0
2922190900	AROMATIC AMINO-ALCOHOLS,ETC USED AS DRUGS,NESOI	0	0	0	0	0	0	0
2922191800	OTHER AROMATIC AMINO-ALCOHOLS, THEIR ETHERS AND ES	0	0	0	0	0	0	0
2922292700	AMINO-NAPHTHOLS AND AMINO-PHENOLS,ETC USED AS DRUG	0	0	0	0	0	0	0
2922492600	AROMATIC AMINO-ACIDS ETC FOR USE AS DRUGS	0	0	0	0	0	0	0
2922492700	AROMATIC AMINO-ACIDS AND THEIR ESTERS,OTHER THAN T	0	0	0	0	0	0	0
2922501400	OTHER AROMATIC CARDIOVASCULAR DRUGS	0	0	0	0	0	0	0
2922502500	OTHER AROMATIC AMINO-ALCOHOL-PHENOL DRUGS	0	0	0	0	0	0	0
2924296250	OTHER AROMATIC CYCLIC AMIDES AND DERIVATIVES FOR U	0	0	0	0	0	0	0
2928003000	NON-AROM ORGAN DERIV OF HYDRAZINE ETC USED AS DRUG	0	0	0	6,500	0	85,780	0
2930909030	OTHER NON-AROMATIC ORGANO-SULFUR COMPOUNDS USED PR	0	0	0	0	0	0	0
2930909035	OTHER NON-AROMATIC ORGANO-SULFUR COMPOUNDS USED AS	0	0	0	0	0	0	0
2931002200	AROMATIC ORGANO-INORGANIC COMPOUNDS USED AS DRUGS	0	0	0	0	0	0	51,925
2932191000	AROMATIC COMPOUNDS CONTAINING AN UNFUSED FURAN RIN	0	0	0	0	0	0	0
2932292000	AROMATIC LACTONES USED AS DRUGS	0	0	0	0	0	0	0
2932910000	ISOSAFROLE	0	0	6,598	0	0	4,650	0
2932920000	1-(1,3-BENZODIOXOL-5-YL)PROPAN-2-ONE	0	38,611	1,970,670	0	1,672,907	0	0
2932950000	TETRAHYDROCANNABINOLS (ALL ISOMERS)	0	0	0	0	0	0	462,000
2932995500	BIS-O-[(4-METHYL PHENYL)-METHYLENE]-D-GLUCITOL (DI	0	0	0	0	12,375	0	0
2932996550	AROMATIC PESTICIDES WITH OXYGEN HETERO-ATOM(S) ON	1,255,625	4,115	0	0	0	0	0
2932996560	AROMATIC PESTICIDES WITH OXY HETERO-ATOM(S) NESOI	0	0	5,214	0	35,886	458,405	990,930
2932997000	OTHER AROM HETERO ETC EXCL PROD IN U.S. NT 3 SEC 6	0	0	0	0	0	0	0
2933193500	AROMATIC OR MOD AROM DRUGS CONT AN UNFUSED PYR ETC	0	0	0	0	0	0	0
2933292000	AROMATIC OR MODIFIED AROMATIC DRUGS CONTAINING AN	0	0	0	0	0	0	0
2933294500	DRUGS (EXCLUDING AROMATIC OR MODIFIED AROMATIC) CO	0	0	0	0	0	0	0
2933330000	ALFENTANIL, AMILERIDINE, BEZITRAMIDE(INN), ETC.	0	0	0	0	0	0	0
2933394100	DRUGS CONTAINING AN UNFUSED PYRIDINE RING (WHETHER	0	0	0	0	0	0	0
2933402000	5-CHLORO-7-IODO-8-QUINOLINOL (ODOCHLORHYDROXYQUIN	0	0	0	0	0	0	0
2933402600	OTHER DRUGS CONTAINING A QUINOLINE OR ISOQUINOLINE	0	0	0	0	0	0	0
2933410000	LEVORPHANOL (INN) AND ITS SALTS	0	0	0	0	0	0	0
2933490800	4,7-DICHLOROQUINOLINE	0	0	0	0	0	0	0
2933492000	ODOCHLORHYDROXYQUIN; DECOQUINATE ETC	0	0	0	0	0	0	0
2933492600	DRUGS CONT A QUINOLINE OR ISOQUINOLINE ETC, NESOI	0	0	0	0	0	0	0
2933550000	LOPRAZOLAM (INN), MECLOQUALONE (INN), ETC & SALTS	0	0	0	0	0	0	7,500
2933592100	ANTIHISTAMINES, INCLUDING ANTINAUSEANTS	0	0	0	0	0	0	0
2933593600	OTHER AROMATIC OR MODIFIED AROMATIC ANTI-INFECTIVE	0	0	0	0	0	0	0
2933595300	OTHER AROMATIC OR MODIFIED AROMATIC DRUGS CONTAINI	0	0	0	0	0	0	0
2933595900	OTHER DRUGS (EXCLUDING AROMATIC OR MODIFIED AROMAT	0	0	0	0	0	0	0
2933595950	DRUGS CONTAINING A PYRIMIDINE RING (WHETHER OR NOT	8,007	5,767	0	0	0	0	0
2933595960	DRUGS CONT A PYRIMIDINE OR PIPERAZINE RING ETC	0	0	4,254	89,492	1,098,473	632,526	2,391,669
2933904600	OTHER ANTI-INFECTIVE AGENTS	0	0	0	0	0	0	0
2933905300	OTHER CARDIOVASCULAR DRUGS	1,800,000	0	0	0	0	0	0
2933905590	OTHER ANALGESICS, ANTIPIRETTICS AND NON-HORMONAL AN	0	0	0	0	0	0	0
2933906500	ANTICONVULSANTS, HYPNOTICS & SEDATIVES W/HETEROCYC	0	0	0	0	0	0	0
2933907000	OTHER DRUGS PRIMARILY AFFECTING THE CENTRAL NERVOU	0	0	0	0	0	0	0
2933910000	ALPRAZOLAM, CAMAZEPAM, CHORDIAZEPOXIDE (INN), ETC.	0	0	0	97,812	11,883	14,695	0
2933994600	ANTI-INFECTIVE AGENTS, NESOI	0	0	184,381	0	417,933	1,078,612	0
2933995300	CARDIOVASCULAR DRUGS, NESOI	0	0	0	176,945	25,055	51,572	52,314
2933995500	ANALGESICS, ANTIPIRETTICS AND NON-HORMONAL ETC	0	0	0	4,500	0	0	25,500
2933995590	ANALGESICS, ANTIPIRETTICS & NON-HORMONAL AGTS NESOI	0	0	0	0	0	0	0
2933996100	ANTIDEPRESSANTS, TRANQUILIZERS ETC, NESOI	0	0	6,720	0	0	23,981	10,643
2933996500	ANTICONVULSANTS, HYPNOTICS AND SEDATIVES	0	0	3,000	32,640	0	0	0
2933997000	DRUGS PRIM AFFECT THE CENT NERV SYSTEM, NESOI	0	0	234,305	386,800	360,058	654,218	1,327,650
2934302700	DRUGS W/ A PHENO RING SYS (W/T HYDRO), NESOI	0	0	0	0	0	0	0
2934903000	OTHER HETEROCYCLIC COMPOUNDS USED AS DRUGS	0	0	0	0	0	0	0
2934910000	AMINOREX, BROTILOZOLAM, CLOZIAZEPAM (INN) ETC.	0	0	0	0	0	0	0
2934993000	HETEROCYC CMDPS. USED AS DRUGS, NESOI	0	0	0	0	0	0	0
2937100000	PITUITARY (ANTERIOR) OR SIMILAR HORMONES	0	0	0	0	0	0	0
2937110000	SOMATOTROPIN, ITS DERIVS & STRUCT ANALOGUES	0	0	0	0	0	0	0
2937190000	POLYPEPTIDE, PROTEIN & GLYCOPROTEIN HORMONES,NESOI	0	0	14,230	23,168	14,684	176,781	192,032
2937230000	ESTROGENS AND PROGESTINS	0	0	25,838	37,975	261,642	116,915	0
2937231010	ESTROGENS OF ANIMAL OR VEGETABLE ORIGIN	0	0	0	0	0	0	0
2937231050	PROGESTINS OF ANIMAL OR VEGETABLE ORIGIN, NESOI	0	0	0	0	0	0	0
2937235010	ESTROGENS NOT DERIV FROM ANIMAL OR VEGETABLE MATER	0	0	0	0	0	0	0
2937235020	PROGESTERONE NOT DERIV FR ANIMAL OR VEGETABLE MATER	0	0	0	0	0	0	0
2937235050	PROGESTINS NOT OF ANIMAL OR VGTABLE ORIGIN, NESOI	0	0	0	0	0	0	0
2937399000	CATECHOLAMINE HORMONES, DERIVS & ANALOGUES NESOI	0	0	0	0	0	0	0
2937409000	HORMONE AMINO-ACID DERIVATIVES, NESOI	0	0	0	0	0	0	0
2937500000	PROSTAGLANDINS, THROMBOXANES & LEUKOTRIENES	0	0	0	0	0	0	0
2937900000	HORMONES, PROSTAGLANDINS, ETC NESOI	0	0	0	0	0	0	0
2937920000	ESTROGENS AND PROGESTINS	6,650	0	0	0	0	0	0
2937921010	ESTROGENS OF ANIMAL OR VEGETABLE ORIGIN	0	0	0	0	0	0	0
2937921050	OTHER PROGESTINS OF ANIMAL OR VEGETABLE ORIGIN	0	0	0	0	0	0	0
2937925010	ESTROGENS NOT DERIVED FROM ANIMAL OR VEGETABLE MAT	0	0	0	0	0	0	0
2937925020	PROGESTERONE NOT DERIVED FROM ANIMAL OR VEGETABLE	0	0	0	0	0	0	0
2937925050	OTHER PROGESTINS NOT DERIVED FROM ANIMAL OR VEGETA	0	0	0	0	0	0	0
2937999550	OTHER HORMONES AND THEIR DERIVATIVES, OTHER STEROI	0	0	0	0	0	0	0
2940002000	D-ARABINOSE	59,300	2,784	2,529	22,419	0	4,445	0
2940006000	OTHER SUGARS, NESOI EXCL D-ARABINOSE	0	78,677	129,036	200,486	408,813	706,073	591,448
3002100030	HUMAN IMMUNE BLOOD SERA	0	61,146	0	0	0	0	0
3002100040	FETAL BOVINE SERUM (FBS)	452,826	227,113	0	0	0	0	0
3002100060	OTHER BLOOD FRACTIONS NOT ELSEWHERE SPECIFIED OR I	1,901,263	3,380,810	0	0	0	0	0
3002100090	OTHER BLOOD FRACTIONS NOT ELSEWHERE SPECIFIED OR I	0	0	0	0	0	0	0
3002100130	HUMAN IMMUNE BLOOD SERA	0	0	390,024	237,318	0	182,064	0

## US Exports of Advanced Technology Products to China

HS Code	Commodity Description	2000	2001	2002	2003	2004	2005	2006
3002100140	FETAL BOVINE SERUM (FBS)			344,814	560,379	9,959	13,166	47,040
3002100190	BLOOD FRACTIONS NESOI			3,761,257	7,056,334	4,321,144	16,565,617	17,708,737
3002200000	VACCINES FOR HUMAN MEDICINE	243,767	66,269	25,000	667,508	178,553	375,600	997,302
3002300000	VACCINES FOR VETERINARY MEDICINE	3,283,512	4,954,244	6,267,434	5,717,431	5,351,483	9,965,735	12,394,649
3002900500	OTHER TOXINS, CULTURES OF MICRO-ORGANISMS (EXCLUDING	170,175	159,796					
30029005120	ANTIALLERGENIC PREPARATIONS, NESOI	0		80,098	78,597			
30029005150	HUMAN BLOOD;ANIMAL BLOOD PREPARED FOR THERAP,NESOI	0		407,573	685,661	1,043,932	953,893	1,507,285
3004900900	MEDICAMENTS NOT ELSEWHERE SPECIFIED OR INCLUDED	0	0					
30049009190	MEDICAMENTS IN MEAS DOSES FOR RETAIL SALE, NESOI	0		0	0	0	0	0
3818000000	CHEMICAL ELEMENTS DOPED FOR USE IN ELECTRONICS, IN	6,595,409	8,862,114	10,741,089	26,089,378	38,146,081	24,458,123	89,404,701
3818000010	GALLIUM ARSENIDE WAFERS, DOPED	0	0	0	0	0	0	0
3818000090	OTHER CHEMICAL ELEMENTS DOPED FOR USE IN ELECTRONI	0	0	0	0	0	0	0
8401100000	NUCLEAR REACTORS		31,630	255,600	255,600	200,000		12,526
8401200000	ISOTOPIC SEPARATION MACHINERY AND APARATUS AND PAR	2,659,230	1,395,359	1,037,369	1,621,993	3,510,843	1,105,666	57,384
8401300000	FUEL ELEMENTS (CARTRIDGES), NON-IRRADIATED FOR NUC	114,350	558,400	0	210,905	98,742	487,495	31,673
8401400000	PARTS OF NUCLEAR REACTORS	398,487	1,844,695	67,688	149,643			
8411114010	TURBOJET AIRCRAFT TURBINES (ENGINES) FOR USE IN CI	463,501	57,793,850	27,357,481	8,000,450	267,119	6,716	5,162,591
8411114050	TURBOJET A/C TURBINES EXC CIVIL, THRUST LE 25 KN	0	0	0	5,604			
8411124000	TURBOJET AIRCRAFT ENGINES, THRUST EXCEEDING 25 KN	0	0	0	0	0	0	0
8411124010	TURBOJET TBN FOR CIVIL AIRCRAFT, THRUST OV 25 KN	41,950,388	52,109,172	124,000,000	172,000,000	96,729,584	85,361,574	106,726,320
8411214010	TURBOPROPELLER A/C TBN, CIVIL, POWER NOT OV 1100KW	0	0	0	0	0	0	3,391,948
8411224000	TURBOPROPELLER AIRCRAFT ENGINES, POWER EXC 1100 KW	0	0	0	0	0	0	0
8411224010	TURBOPROPELLER A/C TBN, POWER OVER 1100 KW	0	0	0	0	112,500	0	250,580
8411814000	GAS TURBINE A/C ENGINES,NESOI,POWER NOT EXC 5000KW	0	0	0	0	0	0	0
8411814010	GAS TURBINE A/C TBN FOR CIVIL A/C, 5000 KW AND UND	769,594	2,003,000	150,000	975,325	180,000	959,739	2,072,356
8411824010	GAS TURBINE A/C TURBINE FOR CIVIL A/C, OVER 5000 K	0	0	0	14,800,000	7,000,000	8,080,960	2,260,000
8411824050	AIRCRAFT TURBINES (ENGINES), EXCEPT FOR USE IN CIV	15,600			0			
8411917010	PARTS OF TURBOJETS AND TURBOPROPELLER AIRCRAFT ENG	27,402,280	32,677,607	48,328,512	49,075,130	50,047,240	44,645,887	69,668,595
8411917050	PARTS OF TURBOJET AND TURBOPROPELLER AIRCRAFT ENGI	225,607	1,528,049	595,677	589,693	199,547	883,552	693,491
8411919080	PARTS, NESOI, OF TURBOJET OR TURBOPROPELLER AIRCRA	0	0	0	0	0	0	0
8411997010	PARTS OF GAS TURBINE AIRCRAFT ENGINES FOR USE IN C	7,471,545	15,034,306	2,882,493	2,411,974	2,878,844	3,709,877	19,333,145
8411997050	PARTS OF GAS TURBINE AIRCRAFT ENGINES, OTHER THAN	2,442,950	379,247	3,606,164	10,064,488	3,576,662	6,339,785	2,472,094
8411999090	PARTS,NESOI,OF AIRCRAFT GAS TURBINES, EXCEPT TURBO	0	0	0	0	0	0	0
8424893000	SPRAYING APPLIANCES FOR ETCHING, STRIPPING OR CLEA	1,663,171	3,418,121	5,340,068	8,386,821	5,827,591	5,808,872	4,745,852
8424895000	SPRAYING APPLIANCES DEVELOPING SEMICONDUCTOR WAFER	0	0	0	0	0	0	0
8427108060	AUTOMATED GUIDED VEHICLES (AGV) FITTED WITH LIFTIN	225,714	176,000	1,792,012	156,407	260,904	10,699	1,296,771
8428900010	INDUSTRIAL ROBOTS FOR LIFTING, HANDLING, LOADING O	0	0	0	0	0	0	0
8428900015	INDUSTRIAL ROBOTS FOR LIFTING, HANDLING, LOADING O	309,775	1,599,715	6,078,346	1,886,839	2,749,471	7,464,154	5,119,375
8456100000	MACHINE TOOLS FOR WORKING ANY MATERIAL BY REMOVAL	16,759,971	12,248,076	22,452,149	8,475,739	19,904,100	13,869,348	20,162,476
8456101010	MACHINE TOOLS FOR WORKING METAL, BY LASER OR OTHER	0	0	0	0	0	0	0
8456101020	MAC TOOL,MTL WRK,LASER,LIGHT OR PHOTON BEM,EXC,N/C	0	0	0	0	0	0	0
8456106000	MACH TOOLS USE IN SEMICONDUCTOR WAFER PRODUCTIONS	0	0	0	0	0	0	0
8456108000	MACHINE TOOLS OPERATED BY LASER PROCESSES, NESOI	0	0	0	0	0	0	0
8456200000	MACHINE TOOLS FOR WORKING ANY MATERIAL BY REMOVAL	68,269	30,345	2,712,949	2,052,003	1,503,811	277,972	135,996
8456201050	MACHINE TOOLS FOR WORKING METAL, BY ULTRASONIC PRO	0	0	0	0	0	0	0
8456205000	MACH TOOLS, EXC MTL WRK, ULTRASONIC PROCESSES	0	0	0	0	0	0	0
8456300000	ELECTRO-DISCHARGE MACHINE TOOLS FOR REMOVING MATL	295,135	1,390,217	2,078,617	1,106,295	1,343,153	1,939,826	894,263
8456301020	MAC TOOL,MTL WRK,ELECTRO-DISCHRG, TRAVEL WIRE TYPE	0	0	0	0	0	0	0
8456301050	MC TL,MTL WRK,ELETRD-DSCHRG PROCES,EX TVL-WIRE,N/C	0	0	0	0	0	0	0
8456301070	MC TL,MTL WRK,ELTRO-DSCHRG PROC,EX TVL-WIRE,EX N/C	0	0	0	0	0	0	0
8456305000	MACHINE TOOLS FOR WORKING MATERIAL OTHER THAN META	0	0	0	0	0	0	0
8456910000	DRY ETCHING (INCLUDING PLASMA) MACHINES DESIGNED T	30,338,172	31,179,637	81,830,194	37,389,295	199,000,000	77,479,306	205,590,032
8456991000	FOCUSED ION BEAM MILLING MACHINES TO PRODUCE OR RE	39,135	356,000	420,190	716,000	265,186	652,335	1,809,340
8456993005	MACHINE TOOLS FOR WORKING METAL, OF A KIND USED FO	0	790,258	769,798	62,499	133,880	1,191,410	357,074
8456993040	MACHINE TOOLS FOR WORKING METAL, BY ELECTRON BEAM O	2,517,134	546,083	2,222,224	716,168	1,064,436	3,897,713	6,732,479
8456993060	MACHINE TOOLS FOR WORKING METAL, OF A KIND USED FO	0	31,324	40,598	38,835	44,781	56,760	58,611
8456993080	MACHINE TOOLS FOR WORKING METAL, BY ELECTRON BEAM,	25,000	27,473	95,000	0	0	60,590	1,899,513
8456995000	MACHINE TOOLS FOR WORKING ANY MATERIAL OTHER THAN	2,583,129	910,611	1,909,601	2,342,525	5,088,347	5,534,211	4,909,119
8456997000	MACH TOOLS FOR STRIPPING/CLEAN SEMICONDUCTOR WAFER	0	0	0	0	0	0	0
8456999000	MACH TL ELECTRO-CHEM,BEAM,IONIC-BEAM,PLSM NESOI	0	0	0	0	0	0	0
8457100015	MAC CENTR,AUTO TOOL CHNG,VERT-SPIN,Y-AXIS N/O 660MM	2,019,615	3,870,612	2,119,540	6,924,575	8,112,087	12,109,230	2,895,551
8457100025	MAC CENTR,AUTO TOOL CHNG,VERT-SPIN,Y-AXIS OV 660MM	89,000	546,490	644,550	333,000	1,015,718	2,473,752	1,970,538
8457100035	MACHING CENTERS, AUTO TOOL CHNG, EXCEPT VERTICAL	1,061,500		1,290,685	769,478			
8457100036	HORIZONTAL MACHING CENTERS WITH ATC	0				3,714,223	2,071,100	1,720,740
8457100039	MACHING CENTERS, AUTO TOOL CHNG, NESOI	0				3,294,718	3,427,575	4,386,991
8457100060	HORIZONTAL SPINDAL MACHINES (685MM-1016MM)	0		0	0			
8457100065	HORIZONTAL SPINDAL MACHINES GT 1016 MM	0				0	0	0
8457100070	MACHING CENTERS, AUTO TOOL CHNG, NESOI	0				0	0	0
8457200010	UNIT CONSTRUCTION MACHINES (SINGLE STATION), N/C	1,648,785	15,760,500	26,703,414	1,327,843	688,332	0	1,681,800
8457300010	MULTISTATION TRANSFER MACHINES, N/C	0		0	0	0	0	0
8458110010	HORIZONTAL LATHES, MULTIPLE SPINDLE, METAL REMOVIN	608,000	0	0	369,042	354,045	409,408	796,508
8458110030	HORIZONTAL LATHES, EXCEPT MULTIPLE SPINDLE, METAL	1,231,985	15,517,437	2,249,219	169,466	700,494	654,926	12,743,788
8458110050	HORIZONTAL LATHES, EXCEPT MULTIPLE SPINDLE, METAL	2,659,062	473,073	1,173,992	488,235	0	1,540,663	3,088,484
8458110090	HORIZONTAL LATHES, EXCEPT MULTIPLE SPINDLE, METAL	0	116,050	320,000	0	153,178	262,525	4,557,890
8458911060	VERTICAL TURRET LATHES, METAL REMOVING, NUMERICALL	0	0	0	0	0	0	0
8458911080	VERT TURT LATH,MTL REMOV, N/C, EXC MULTI SPIN, NEW	0	91,988	0	0	173,708	0	0
8458915050	LATHES FOR REMOV MTL, N/C, MULT SPIN, NEW, NESOI	0						
8458915070	LATHES FOR REMOV MTL,N/C,EXC MULTI SPIN,NEW,NESOI	0			97,000	3,631,983	999,000	1,139,000
8459100000	WAY-TYPE UNIT HEAD MACHINES	223,411	420,550	861,990	0	0	161,342	240,000
8459210080	DRILLING MACH, METAL, N/C, NEW	2,958,240	1,783,033	2,283,940	1,170,583	3,170,871	1,719,810	1,300,000
8459310010	BOR-MIL MAC,HORIZ SPIN, TABLE TYP,MTL REMOV,N/C,NEW	0			368,800	3,705,000	0	0
8459310040	BOR-MIL MAC,HORIZ SPN,EX TBL TYP,MTL REMOV,N/C,NEW	0					0	0
8459310070	BOR-MIL MAC,EXC HORIZ SPIN,MTL REMOV,N/C,NEW,NESOI	0			70,000	0	0	75,000
8459400040	BORING MAC,VERT,MTL REMOV,N/C,OVER \$3025,NEW	685,704	2,261,676	0	1,419,800	56,610	2,652,141	6,031
8459400070	BORING MACH,EX VERT,MTL REMOV, N/C,OVER \$3025 NEW	0			0			
8459510080	MILLING MACHINES, KNEE TYPE, METAL REMOV, N/C, NEW	70,060	0	0	0	105,709	0	25,738
8459610080	MILLING MACH, EXC KNEE TYP, MTL REMOV, N/C, NEW	0	3,974,270	1,120,000	5,656,605	4,600,003	8,055,001	3,821,829
8459700020	THREADING OR TAPPING MACHINES, METAL REMOVING, N/C	0		570,903	10,000	0	0	224,000
8460110080	FLAT SURFACE GRINDING MACHINES, METAL REMOVING, AC	0		91,500	241,894	0	0	89,520
8460210080	GRINDING MACHINES EXCEPT FLAT SURFACE, METAL REMOV	0	2,052,312	538,436	754,190	1,277,804	2,961,200	1,828,959
8460310080	SHARPENING (TOOL OR CUTTER GRINDING) MACHINES, MET	5,970	0	57,111	0	0	300,000	604,940
8460400060	HONING OR LAPPING MACHINES, METAL REMOVING, NUMERI	1,300,000	1,918,942	5,440	1,950,139	5,874,991	1,368,555	2,624,074
8460404060	HONING OR LAPPING MACHINES, METAL REMOVING, NUMERI	0	0	0	0	0	0	0
8460900060	MAC TOOLS USING ABRASIVES,NESOI,N/C,OV \$3025, NEW	0		67,331	21,362	1,211,351	11,926	357,024
8460904060	MAC TOOLS USING ABRASIVES,NESOI,N/C,3,025OVER, NEW	0		0	0	0	0	0

US Exports of Advanced Technology Products to China

HS Code	Commodity Description	2000	2001	2002	2003	2004	2005	2006
8461200010	SHAPING OR SLOTTING MACHINES, METAL REMOVING, N/C	0		0	1,401,000	0	833,878	154,800
8461204000	SHAPING OR SLOTTING MACHINES, METAL REMOVING, N/C	0				0		
8461300060	BROACHING MACH, METAL REMOV, N/C, OVER \$3025, NEW	0		0	212,500	0	840,000	1,866,285
8461304060	BROACHING MACH, METAL REMOV, N/C, NEW	0				0	0	0
8461500050	SAWING OR CUTTING-OFF MACHINES, METAL REMOVING, NU	0	12,000	207,299	104,002	0	142,075	48,295
8461504050	SAWING OR CUTTING-OFF MACHINES, METAL REMOVING, NU	0	0	0	0	0	0	0
8461900040	MACHINE TOOLS WORKING BY REMOVING METAL, NESOI, NU	0	19,808			0	0	0
8461903040	PLANING MAC,METAL REMOV,NUM CTRL,OVR \$3025,NEW	0		68,309	0	0	10,000	0
8461903080	MAC TOOLS, MTL REMOV,NUM CTRL,OV\$3025,NEW,NESOI	0		1,088,192	142,110	350,700	418,308	822,452
8462210080	BENDING, FOLDING, STRAIGHTENING OR FLATTENING MACH	1,366,249	2,830,381	338,178	4,107,369	2,184,434	5,680,769	12,034,745
8462214085	NUMERIC CONTROL MACH FR BEND SEMICONDC LEAD,NESOI	0		0	0	0	0	0
8462218085	BENDING, FOLDING, OR FLATTENING MACHINES (INCLUDIN	0	0	0	0	0	0	0
8462310080	SHEARING MACHINES (INC PRESSES), OTHER THAN COMBIN	0				0	0	492,762
8462410080	PUNCHING OR NOTCHING MACHINES (INC PRESSES), INCLU	746,000	2,200,234	3,136,189	279,863	5,049,350	4,920,437	5,774,000
8462910060	HYDRAULIC PRESSES, METAL FORMING, NUMERICALLY CONT	0	684,506	0	367,253	391,924	215,829	4,611,774
8462914060	HYDRAULIC PRESSES, METAL FORMING, NUMERICALLY CONT	0	0	0	0	0	0	0
8462990030	MACHINE TOOLS (INCLUDING PRESSES) WORKING BY FORMI	361,528	56,830	0	236,584	15,629	133,738	1,471,981
8464100040	SAW MACH DESIGND TO SAW BLANK SEMICONDUCTOR WAFERS	1,112,025	3,657,036	200,130		148,910	179,014	592,085
8464201000	GRIND/POLISH MACH FR PROCESSING SEMICONDUCTOR WAFER	0						0
8464901040	MACH TOOLS FR SCRIBING/SCORING SEMICONDUCTOR WAFER	607,385		735,075	798,117	679,921	1,156,646	662,563
8464901060	MACH TLS FR SCRIBING/SCORING SEMICONDUCTOR WAFERS	12,946,369	14,325,072	11,709,101	831,821	5,017,654	0	110,000
8464906000	MACHINE TOOLS FOR WET DEVELOPING OR STRIPPING	0		595,807	1,639,690	1,241,600	736,000	3,141,688
8465100025	WOODWORKING TENONERS,NUMERICALLY CONTROLLED,NEW	0					0	0
8465920055	ROUTERS, NEW, NUMERICALLY, WOODWORKING MACHINES	0					0	0
8465950020	BORING MACHINES, N/C, WOODWORKING, NEW	0					0	0
8470500020	POINT-OF-SALE TERMINAL TYPE CASH REGISTERS	446,362	772,714	63,843	453,903	990,888	1,719,151	2,692,682
8471100000	ANALOG OR HYBRID AUTOMATIC DATA PROCESSING MACHINE	16,776,868	23,713,453	7,923,286	9,111,507	8,812,632	16,889,501	10,295,435
8471300000	PORTABLE DIGITAL ADP MACHINE, WEIGHING NOT MORE TH	14,051,978	10,979,204	15,142,527	21,344,520	45,616,536	62,392,886	70,560,140
8471410035	DIGITAL ADP MACH CONTAINING IN SAME HOUSING AT LEA	11,055,061	7,709,557	8,330,517	5,680,046	10,300,776	10,980,429	7,384,417
8471410065	DIGITAL ADP MACH CONTAINING IN SAME HOUSING AT LEA	5,562,600	3,528,920	2,953,754	3,161,668	3,396,577	3,592,407	3,549,653
8471410095	DIGITAL ADP MACH CONTAINING IN SAME HOUSING AT LEA	20,009,978	15,666,005	12,672,359	9,101,704	15,013,533	15,029,101	30,900,272
8471491035	DIGITAL PROCESSING UNIT WHICH MAY CONTAIN IN SAME	135,656,762	173,890,121	147,000,000	129,000,000	144,000,000	128,508,301	145,962,219
8471491065	DIGITAL PROCESSING UNIT WHICH MAY CONTAIN IN SAME	562,713	2,033,537	524,111	439,817	850,425	233,653	840,142
8471491095	DIGITAL PROCESSING UNIT WHICH MAY CONTAIN IN SAME	22,050,843	18,009,364	38,521,760	29,083,986	18,433,255	10,787,632	20,398,358
8471491500	COMBINATION INPUT/OUTPUT UNITS WITHOUT A CRT,WHETH	674,520	1,581,791	632,553	700,922	4,016,547	8,490,383	9,767,826
8471492400	DISPLAY UNITS, NOT INCORPORATING A CRT, HAVING A V	541,136	2,335,154	4,081,986	2,302,851	900,357	216,741	3,947,684
8471492600	COLOR CATHODE-RAY TUBE (CRT) MONITORS, ENTERED WIT	4,249,121	328,159	142,695	1,180,334	683,609	446,211	603,204
8471492900	DISPLAY UNITS, NESOI, NOT INCORPORATING A CRT, ENT	244,626	499,055	2,437,554	340,716	819,376	776,102	828,136
8471494200	OPTICAL SCANNERS AND MAGNETIC INK RECOGNITION DEVI	1,294,990	3,688,174	1,363,231	2,145,864	1,730,109	2,133,508	4,183,024
8471494850	CARD KEY AND MAGNETIC MEDIA ENTRY DEVICES, ENTERED	202,063	29,377	24,640	32,869	299,848	18,201	16,752
8471494875	ADP OUTPUT DEVICES, NESOI, ENTERED IN THE FOR OF S	425,713	702,756	302,719	61,336	89,072	516,359	246,315
8471494895	ADP INPUT UNITS, NESOI, ENTERED IN THE FORM OF SYS	439,677	2,774,405	1,672,830	3,632,945	1,271,004	1,578,767	54,189
8471495010	MAGNETIC DISK DRIVE UNITS WITH A DISK DIAMETER GT=	168,208	72,512	6,712	10,933	48,270	54,149	11,113
8471495020	FLEXIBLE (FLOPPY) MAGNETIC DISK DRIVE UNITS, NESOI	44,665	565,460	240,050	11,504	334,688	573,911	418,827
8471495040	HARD MAGNETIC DISK DRIVE UNITS, NESOI, ENTERED WIT	1,585,435	3,595,646	3,261,006	718,036	755,074	928,196	3,919,697
8471495060	DISK DRIVE UNITS, NESOI, ENTERED WITH THE REST OF	2,451,611	3,348,880	1,726,918	880,192	425,895	76,160	2,556,711
8471495080	OTHER STORAGE UNITS, NESOI, ENTERED WITH THE REST	88,322	168,872	689,605	565,478	983,121	3,997,334	7,725,943
8471496000	CONTROL OR ADAPTER UNITS FOR AUTOMATIC DATA PROCES	1,067,401	1,785,664	2,780,828	802,711	2,684,302	2,830,562	13,083,144
8471498500	UNITS, NESOI, SUITABLE FOR PHYSICAL INCORPORATION	0	0	0	0	0	0	0
8471499000	AUTOMATIC DATA PROCESSING UNITS,NESOI, ENTERED WIT	3,212,358	968,745	3,971,990	17,896,422	9,442,761	17,452,566	15,300,473
8471499500	UNITS, NESOI, FOR AUTOMATIC DATA PROCESSING MACHIN	0	0	0	0	0	0	0
8471500035	DIGITAL PROCESSING UNIT WHICH MAY CONTAIN IN SAME	2,230,910	1,233,708	1,073,241	543,219	406,763	290,791	1,278,614
8471500065	DIGITAL PROCESSING UNIT WHICH MAY CONTAIN IN SAME	159,750	348,035	1,393,300	418,732	68,257	413,639	160,175
8471500085	DIGITAL PROCESSING UNITS EXCLUDE SUBHEADING 8471.4	114,542,955	72,832,185	51,011,037	48,135,836	40,104,803	93,192,041	87,461,637
8471601035	COMBINATION INPUT/OUTPUT UNITS WITH COLOR CATHODE	26,150	1,484,300	422,295	157,579	54,573	60,127	88,520
8471601065	COMBINATION INPUT/OUTPUT UNITS WITH A MONOCHROME C	28,000	0	0	0	0	0	165,887
8471601095	COMBINATION INPUT/OUTPUT UNITS WITHOUT A CRT,WHETH	765,855	3,011,332	593,356	1,664,110	4,281,881	4,940,752	9,902,558
8471603000	DISPLAY UNITS, NOT INCORPORATING A CRT, HAVING A V	4,553,027	5,914,350	2,015,519	1,013,648	1,157,286	723,006	1,427,270
8471604580	DISPLAY UNITS, NESOI, NOT INCORPORATING A CRT	0	0	0	0	0	12,241,920	11,544,314
8471605100	LASER PRINTER UNITS INCORPORATING AT LEAST THE MED	0	0	0	0	0	1,767,094	1,667,480
8471605200	LASER PRINTER UNITS INCORPORATING AT LEAST THE MED	0	0	0	0	0	4,374,456	6,726,950
8471607040	OUTPUT DEVICES, NESOI, SUITABLE FOR INCORPORATION	1,077,383	1,719,717	580,595	348,275	424,172	224,120	407,751
8471607080	INPUT UNITS, NESOI, SUITABLE FOR PHYSICAL INCORPOR	3,906,654	1,992,075	344,120	653,376	584,428	998,311	415,859
8471608000	OPTICAL SCANNERS AND MAGNETIC INK RECOGNITION DEVI	5,774,366	2,888,497	9,904,038	11,582,035	14,561,931	18,539,526	20,492,135
8471609030	CARD KEY AND MAGNETIC MEDIA ENTRY DEVICES	39,175	114,353	184,437	198,332	1,138,564	55,576	143,256
8471609070	ADP OUTPUT DEVICES, NESOI	35,495	14,948	11,484	36,195	28,727	480,495	720,176
8471609090	ADP INPUT UNITS, NESOI	1,257,690	1,829,979	1,151,886	4,973,492	6,362,753	3,165,131	3,749,259
8471701000	MAGNETIC DISK DRIVE UNITS WITH A DISK DIAMETER GT=	8,953	234,309	62,457	99,191	226,462	145,778	188,738
8471702000	MAGNETIC DISK DRIVE UNITS FOR AUTOMATIC DATA PROCE	107,000	116,725	1,374,028	9,180,656	1,575,319	3,365,030	4,036,296
8471703000	MAGNETIC DISK DRIVE UNITS, NESOI, WITH A DISK DIAM	510,671	1,019,490	723,454	450,757	505,823	1,193,347	2,190,138
8471704035	FLEXIBLE (FLOPPY) MAGNETIC DISK DRIVE UNITS, NESOI	1,327,526	287,313	705,707	485,806	131,561	90,690	129,241
8471704065	HARD MAGNETIC DISK DRIVE UNITS, NESOI, NOT ASSEMBL	34,695,282	36,264,914	27,004,663	25,698,289	29,329,339	22,851,352	35,720,537
8471704095	DISK DRIVE UNITS, NESOI, NOT ASSEMBLED IN CABINETS	9,360	116,521	109,882	193,307	216,195	1,048,128	1,281,516
8471705035	FLEXIBLE (FLOPPY) MAGNETIC DISK DRIVE UNITS, NESOI	13,000	11,953	11,137	57,695	4,300	44,891	442,586
8471705065	HARD MAGNETIC DISK DRIVE UNITS, NESOI	20,406,980	11,699,041	6,171,203	4,500,994	4,489,632	3,367,628	11,289,965
8471705095	DISK DRIVE UNITS, NESOI	334,372	564,379	398,794	1,689,781	3,107,382	2,881,589	4,332,698
8471706000	OTHER STORAGE UNITS, NESOI, NOT ASSEMBLED IN CABIN	8,497,078	5,715,204	10,140,485	18,431,738	20,409,591	16,877,889	14,110,554
8471709000	OTHER STORAGE UNITS, NESOI	8,856,442	11,476,170	8,053,791	7,792,954	18,189,559	22,973,645	29,902,278
8471801000	CONTROL OR ADAPTER UNITS FOR AUTOMATIC DATA PROCES	438,578,906	435,798,261	193,000,000	146,000,000	155,000,000	102,966,050	113,194,044
8471804000	UNITS, NESOI, SUITABLE FOR PHYSICAL INCORPORATION	12,057,399	26,415,929	102,000,000	139,000,000	116,000,000	95,543,337	120,728,091
8471809000	OTHER UNITS FOR AUTOMATIC DATA PROCESSING MACHINES	1,305,134	2,958,052	2,067,829	3,134,897	6,399,184	9,243,634	23,013,562
8471900000	MACHINES AND UNITS THEREOF FOR PROCESSING DATA, NE	13,845,240	32,736,338	19,993,997	19,139,596	21,031,730	22,129,507	16,956,240
8473300000	PARTS AND ACCESSORIES FOR AUTOMATIC DATA PROCESSIN	527,528,182	611,654,049	413,000,000	497,000,000	564,000,000	977,250,613	1,249,668,730
8473301000	PARTS AND ACCESSORIES OF AUTOMATIC DATA PROCESSING	0	0	0	0	0	0	0
8473301040	PARTS AND ACCESSORIES OF AUTOMATIC DATA PROCESSING	0	0	0	0	0	0	0
8473301080	PARTS AND ACCESSORIES OF AUTOMATIC DATA PROCESSING	0	0	0	0	0	0	0
8473302000	PARTS AND ACCESSORIES, INCLUDING FACE PLATES AND L	0	0	0	0	0	0	0
8473303000	PARTS AND ACCESSORIES OF AUTOMATIC DATA PROCESSING	0	0	0	0	0	0	0
8473305000	PARTS AND ACCESSORIES OF THE MACHINES OF HEADING 8	0	0	0	0	0	0	0
8473306000	OTHER PARTS AND ACCESSORIES OF PRINTERS FOR AUTOMA	0	0	0	0	0	0	0
8473309000	OTHER PARTS AND ACCESSORIES OF AUTOMATIC DATA PROC	0	0	0	0	0	0	0
8473500000	PARTS AND ACCESSORIES EQUALLY SUITABLE FOR USE WIT	927,201	1,283,467	4,880,938	5,679,000	4,974,959	8,981,062	12,029,769
8473503000	PRINTED CIRCUIT ASSEMBLIES EQUALLY SUITABLE FOR US	0	0	0	0	0	0	0
8473506000	PARTS AND ACCESSORIES, INCLUDING FACE PLATES AND L	0	0	0	0	0	0	0
8473509000	PARTS AND ACCESSORIES EQUALLY SUITABLE FOR USE WIT	0	0	0	0	0	0	0

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HS Code	Commodity Description	2000	2001	2002	2003	2004	2005	2006
8479500000	INDUSTRIAL ROBOTS, NESOI	753,317	7,357,492	2,417,915	2,566,982	3,299,197	11,641,470	5,188,363
8479898472	APPARATUS FOR GROWING SEMICONDUCTOR CRYSTALS	0	0	0	1,203,591	590,835	568,000	0
8479898474	MACHINE TO COAT SEMICONDUCTOR WAFERS WITH EMULSION	0	0	1,901,990	3,446,600	4,056,337	923,730	846,085
8479898476	CHEMICAL VAPOR DEPOSITION APPARATUS	0	0	121,000,000	107,000,000	321,000,000	71,719,673	184,035,297
8479898490	MACH NESOI FOR PROD & ASSEMBLY OF SEMICONDUCTORS	0	0	70,412,508	53,035,824	63,734,933	69,579,255	80,042,222
8479898572	APPARATUS DESIGNED TO GROW MONOCRYSTAL SEMICONDUCTO	0	72,135	0	0	0	0	0
8479898574	MACHINES (SPINNERS) DESIGNED TO COAT PHOTOGRAPHIC	735,672	689,329	0	0	0	0	0
8479898576	CHEMICAL VAPOR DEPOSITION (CVD) APPARATUS INCLUDIN	48,032,332	60,963,233	0	0	0	0	0
8479898578	PHYSICAL DEPOSITION APPARATUS INCLUDING SPUTTERING	25,002,469	50,986,163	0	0	0	0	0
8479898590	MACHINES FOR PRODUCTION & ASSEMBY OF DIODES, TRANS	21,592,346	27,890,379	0	0	0	0	0
8479909440	PARTS OF INDUSTRIAL ROBOTS, NESOI	0	0	7,062,568	4,794,473	3,022,999	7,176,063	6,596,930
8479909540	PARTS OF INDUSTRIAL ROBOTS	2,768,847	8,119,987	0	0	0	0	0
8504902000	PARTS OF POWER SUPPLIES FOR AUTOMATIC DATA PROCESS	0	0	0	0	0	0	0
8504904000	OTHER PARTS AND ACCESSORIES OF POWER SUPPLIES FOR	0	0	0	0	0	0	0
8514302000	FURNACES AND OVENS FOR DIFFUSION, OXIDATION OR ANN	3,395,385	5,543,857	3,428,967	2,689,838	7,558,223	11,446,098	1,562,127
8515210000	MACHINES AND APPARATUS FOR RESISTANCE WELDING OF M	1,496,437	839,842	1,273,632	1,525,611	7,197,306	1,621,614	2,699,965
8515310000	MACHINES AND APPARATUS FOR ARC (INCLUDING PLASMA A	3,855,985	7,832,167	10,570,980	10,126,913	11,920,083	11,174,254	10,638,295
8517190000	VIDEOPHONES	2,184,498	4,227,906	2,675,413	1,565,230	3,457,683	6,445,101	8,389,658
8517194000	VIDEOPHONES	0	0	0	0	0	0	0
8517210000	FACSIMILE MACHINES	0	0	0	0	0	49,605	10,218
8517301500	CENTRAL OFFICE SWITCHING APPARATUS	2,878,909	33,267,041	8,333,931	5,172,410	6,115,786	4,395,230	2,499,663
8517302000	PRIVATE BRANCH EXCHANGE SWITCHING APPARATUS	1,663,558	1,126,668	402,023	646,621	1,276,850	524,754	482,444
8517302500	ELECTRONIC KEY TELEPHONE SYSTEMS	0	0	0	0	0	114,827	240,146
8517303000	TELEPHONIC SWITCHING APPARATUS,NESOI	4,909,308	2,277,819	4,228,894	14,545,027	7,154,745	5,121,964	3,643,107
8517305000	TELEGRAPHIC SWITCHING APPARATUS	5,136,637	12,713,375	15,706,896	5,933,308	6,273,640	7,875,612	5,093,271
8517501000	MODEMS (MODULATOR-DEMODULATOR APPARATUS) OF A KIND	21,167,994	14,277,125	30,723,715	22,736,486	3,594,654	6,914,868	6,591,732
8517505000	CARRIER-CURRENT LINE SYSTEM APPARATUS, TELEPHONIC	41,969,384	35,792,075	19,621,653	14,682,913	12,953,703	10,893,349	9,538,102
8517506000	OTHER APPARATUS, TELEGRAPHIC, FOR CARRIER-CURRENT	459,295	601,736	329,838	2,824,729	2,311,818	1,921,414	1,541,904
8517509000	OTHER APPARATUS, TELEGRAPHIC, FOR DIGITAL LINE SYS	11,642,877	100,131,115	106,000,000	125,000,000	150,000,000	208,304,083	225,108,448
8517900400	PARTS OF FACSIMILE MACHINES SPECIFIED IN ADDITIONA	0	0	0	0	0	0	0
8517900800	PARTS OF FACSIMILE MACHINES, NESOI	0	0	0	0	0	0	0
8517902000	PARTS FOR TELEPHONIC SWITCHING APPARATUS	51,760,184	54,983,943	89,186,196	23,323,734	17,090,822	19,517,966	38,271,124
8517902400	PARTS FOR TELEPHONIC SWITCHING OR TERMINAL APPARAT	0	0	0	0	0	0	0
8517902600	PARTS OF TELEGRAPHIC SWITCHING APPARATUS INCORPORA	0	0	0	0	0	0	0
8517903200	PARTS OF ARTICLES OF SUBHEADING 8517.20, 8517.30,	0	0	0	0	0	0	0
8517903400	PARTS OF TELEPHONIC AND TELEGRAPHIC SWITCHING APP	0	0	0	0	0	0	0
8517903600	PRINTED CIRCUIT ASSEMBLIES FOR TELEPHONIC SWITCHIN	0	0	0	0	0	0	0
8517903800	PRINTED CIRCUIT ASSEMBLIES FOR TELEPHONIC APPARATU	0	0	0	0	0	0	0
8517904400	PRINTED CIRCUIT ASSEMBLIES FOR TELEGRAPHIC APPARAT	0	0	0	0	0	0	0
8517905000	PARTS,NESOI,FOR TELEPHONIC APPARATUS	250,796,851	84,827,706	28,503,846	23,803,126	23,291,985	52,222,054	68,768,319
8517905200	PARTS, INCLUDING FACE PLATES AND LOCK LATCHES, FOR	0	0	0	0	0	0	0
8517905800	PARTS FOR TELEPHONIC APPARATUS FOR SWITCHING OR TE	0	0	0	0	0	0	0
8517906400	PARTS OF TELEPHONIC APPARATUS, NESOI	0	0	0	0	0	0	0
8517909000	PARTS FOR TELEGRAPHIC APPARATUS	11,653,820	73,039,982	169,000,000	179,000,000	261,000,000	206,479,534	290,098,871
8519990045	OPTICAL DISC (INCLUDING COMPACT DISC) PLAYERS	0	0	0	0	0	0	0
8521100000	VIDEO RECORDING OR REPRODUCING APPARATUS, WHETHER	2,965,789	4,168,651	713,558	1,323,000	1,107,368	0	0
8521106000	VIDEO CASSETTE OR CARTRIDGE RECORDING AND REPRODUC	0	0	0	0	0	0	0
8521109000	VIDEO RECORDING OR REPRODUCING APPARATUS, MAGNETIC	0	0	0	0	0	0	0
8521900000	VIDEO RECORDING OR REPRODUCING APPARATUS EXCEPT MA	4,532,638	12,648,906	43,619,552	84,231,511	104,000,000	67,945,007	35,802,072
8524310000	DISCS FOR LASER READING SYSTEMS, FOR REPRODUCING P	19,636,736	21,324,078	0	0	0	0	0
8524310030	DISCS FOR LASER READING SYSTEMS FOR REPRODUCING PH	0	0	715,526	671,583	24,641,775	26,084,904	35,145,268
8524310070	LASER DISCS,NOT FOR REPRODUCING SOUND/IMAGE, NESOI	0	0	21,423,897	29,639,109	11,421,177	14,677,954	23,919,599
8524390000	DISCS FOR LASER READING SYSTEMS, NESOI	9,446,792	13,585,859	0	0	0	0	0
8524394000	DISCS FOR REPRODUCING REPRESENTATIONS OF INSTRUCTI	0	0	1,827,516	1,538,580	354,540	1,156,240	117,928
8524398000	DISCS FOR LASER READING SYSTEMS, NESOI	0	0	13,186,158	15,020,427	19,242,982	22,173,028	24,811,714
8524400000	MAGNETIC TAPE RECORDINGS FOR REPRODUCING PHENOMENA	1,037,076	1,668,814	818,764	1,101,331	2,571,617	450,782	886,573
8524910000	OTHER RECORDED MEDIA, NESOI, FOR REPRODUCING PHENO	14,748,789	7,243,936	0	0	0	0	0
8524910030	PREPACKAGED SOFTWARE FOR ADP MACHINES, OF A KIND S	0	0	451,039	149,750	7,953,495	13,836,263	26,734,994
8524910070	OTHER MAGNETIC MEDIA, FOR REPRODUCING PHENOMENA OT	0	0	7,967,505	18,924,104	10,496,765	5,145,327	4,673,867
8524990000	RECORDED MEDIA, NESOI	11,065,237	14,568,993	18,025,073	19,191,937	15,059,812	33,188,172	23,780,726
8524994000	RECORDED MEDIA FOR SOUND OR OTHER SIMILARLY RECOR	0	0	0	0	0	0	0
8525106070	RADIO TRANSMITTERS,NESOI, CAPABLE OF TRANSMITTING	4,592,644	2,295,711	2,614,663	2,179,280	4,053,076	2,023,900	1,523,935
8525106090	RADIO TRANSMITTERS,NESOI, CAPABLE OF TRANSMITTING	611,871	2,247,527	2,602,437	2,534,190	3,856,524	4,299,058	5,690,869
8525107065	TRANSMITTERS CAPABLE OF TRANSMITTING ON FREQUENCY	0	0	0	0	0	0	0
8525107085	TRANSMIT FR FREQUENCY GT 1000 MHZ,RADIOBROADCAST	0	0	0	0	0	0	0
8525107090	TRANSMISSION APPARATUS FOR RADIOBROADCASTING, NESO	0	0	0	0	0	0	0
8525108020	TRANSMISSION APPARATUS,NESOI,FOR CIVIL AIRCRAFT	303,943	1,093,691	1,022,052	636,082	2,408,683	3,052,273	2,050,404
8525108040	TRANSMISSION APPARATUS,NESOI,FOR RADIOTELEPHONY,RAD	4,398,855	3,633,603	3,970,246	3,803,463	6,145,111	2,683,229	3,933,453
8525109025	TRANSMITTERS CAPABLE OF TRANSMITTING ON FREQUENCY	0	0	0	0	0	0	0
8525109065	TRANSMITTERS CAPABLE OF TRANSMITTING ON FREQUENCY	0	0	0	0	0	0	0
8525109085	TRANSMITTERS CAPABLE OF TRANSMITTING ON FREQUENCY	0	0	0	0	0	0	0
8525109090	TRANSMISSION APPARATUS FOR RADIOTELEPHONY OR RADIO	0	0	0	0	0	0	0
8525203025	RADIO TRANSCEIVERS, HAND-HELD, FOR FREQUENCIES EXC	0	0	0	0	0	0	0
8525203055	RADIO TRANSCEIVERS, NESOI, FOR FREQUENCIES EXCEEDI	79,153,282	129,862,830	58,987,825	24,746,627	11,351,069	23,608,534	9,768,877
8525203080	RADIO TRANSCEIVERS,EXCEPT HANDHELD, FOR FREQUENCY	0	0	0	0	0	0	0
8525209020	RADIO TELEPHONES DESIGNED FOR INSTALLATION IN MOTO	1,932,887	1,232,407	2,329,180	4,676,620	2,082,098	1,153,413	745,161
8525209040	RADIO TELEPHONES DESIGNED FOR THE PUBLIC CELLULAR	1,850,138	1,407,438	1,460,774	1,062,045	1,664,504	110,465,366	57,544,522
8525209060	RADIO TELEPHONES DESIGNED FOR THE PUBLIC CELLULAR	0	0	0	0	0	0	0
8525209070	RADIO TELEPHONES DESIGNED FOR THE PUBLIC CELLULAR	0	0	0	0	0	0	0
8525209080	RADIO AND TELEVISION TRANSMISSION APPARATUS, NESOI	50,604,044	130,461,397	51,001,046	47,800,822	69,561,357	26,432,701	15,733,006
8525300020	TELEVISION CAMERAS, COLOR	225,950	1,194,414	840,042	1,374,554	3,209,579	5,072,051	3,217,482
8525300070	TELEVISION CAMERAS, EXCEPT COLOR	69,552	149,474	2,800	232,872	126,412	1,855,273	2,520,618
8525303000	GYROSTABILIZED TELEVISION CAMERAS	0	0	0	0	0	0	0
8525306000	STUDIO TV CAMERAS, EXC SHOULDER-CARRIED & PORTABLE	0	0	0	0	0	0	0
8525309005	TELEVISION CAMERAS, NESOI, COLOR	0	0	0	0	0	0	0
8525309060	TELEVISION CAMERAS, EXCEPT COLOR	0	0	0	0	0	0	0
8525404000	DIGITAL STILL IMAGE VIDEO CAMERAS	52,130	484,246	2,564,290	3,397,059	8,665,335	3,543,992	6,861,370
8525408020	CAMCORDERS, 8 MM	0	0	21,566	73,800	2,554	0	0
8525408050	CAMCORDERS (OTHER THAN 8 MM TYPE), NESOI	139,650	63,192	10,070	477,394	580,095	272,993	129,786
8525408085	STILL IMAGE VIDEO CAMERAS AND VIDEO CAMERA RECORDE	385,485	678,693	652,628	709,422	859,625	3,173,947	3,809,797
8526100020	RADAR DESIGNED FOR BOAT OR SHIP INSTALLATION	219,648	288,873	1,010,867	395,523	475,956	178,463	321,093
8526100040	RADAR APPARATUS, OTHER THAN APPARATUS DESIGNED FOR	0	0	0	0	0	0	0
8526100070	RADAR APPARATUS NESOI	1,666,502	168,644	137,884	334,747	543,568	259,247	331,925
8526910010	RADIO NAVIGATIONAL AID APPARATUS FOR USE IN CIVIL	5,616,354	9,929,330	3,479,870	2,359,042	2,054,418	3,189,464	4,160,162
8526910020	RADIO NAVIGATIONAL AID APPARATUS, RECEPTION ONLY T	0	0	0	0	0	0	0

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8526910030	RADIO NAVIGATIONAL AID APPARATUS, RECEPTION ONLY T	45,430	1,155,921	1,501,435	4,758,273	8,063,375	15,174,476	11,781,292
8526910040	RADIO NAVIGATIONAL AID APPARATUS, NESOI	0	0	0	0	0	0	0
8526910070	RADIO NAVIGATIONAL AID APPARATUS, NESOI	1,666,599	3,271,355	4,029,106	7,131,851	9,471,830	5,368,446	4,669,937
8526920000	RADIO REMOTE CONTROL APPARATUS	216,749	2,089,122	596,532	1,038,021	703,939	1,375,445	1,308,208
8527905000	INFANT NURSERY MONITOR SYSTEMS, PACKAGE CONSISTING	0	0	0	0	0	0	0
8527908045	RADIO RECEIVERS, NESOI, CAPABLE OF RECEIVING SIGNALS	3,551,710	66,869					
8527908055	RADIO RECEIVERS, NESOI, CAPABLE OF RECEIVING SIGNALS	695,644	240,682					
8527908075	RECEPTION APPARATUS FOR RADIOTELEPHONY, RADIOTELEGR	5,514,171	5,124,882					
8527909550	RADIO RECEIVERS CAPABLE OF RECEIVING SIGNALS ON FR	0	0	0	0	0	0	0
8527909560	RADIO RECEIVERS CAPABLE OF RECEIVING SIGNALS ON FR	0	0	0	0	0	0	0
8527909590	RECEPTION APPARATUS FOR RADIOBROADCASTING OR RADIO	0	0	0	0	0	0	0
8527909745	RADIO RECEIVERS (400 - 1000 MHZ)	0	0	0	11,880	15,268	17,272	84,487
8527909755	RADIO RECEIVERS GT 1000 MHZ	0	0	286,625	545,700	1,810,043	1,917,907	398,781
8527909775	RECEPTION APPARATUS RADIO COMMUNICATIONS, NESOI	0	613,687	2,466,832	631,549	501,328	623,192	
8528120400	TV RECEIVERS INCOMPLETE OR UNFINISHED ASSEMB, COLO	0	0	0	0	0	0	0
8528121201	TV RECEIVERS, NON-HIGH DEFINITION, COLOR, SINGLE P	0	0	0	0	0	0	0
8528121601	TV RECEIVERS, NON-HIGH DEFINITION, COLOR, SINGLE P	0	0	0	0	0	0	0
8528122800	RECEPTION APPAR FOR TV, NON-HI DEF, COLOR, SINGLE PIC	0	0	0	0	0	0	0
8528123000	RECEPTION APPARATUS FOR TV, COLOR, INCORPORATING V	1,109,265	595,294	293,119	758,815	3,140,058	3,981,614	7,295,371
8528123600	TV REC, COL, NON-HD, PROJ, CATH-RAY, W/ VIDEO REC/REP	0	0	0	0	0	0	0
8528124000	RECEPTION APPA FOR TV, COLOR, NON-HIGH DEFINITION,	0	0	0	0	0	0	0
8528124400	TV REC, COL, HI-DEF, NON-PROJ, CATH-RAY TUBE W/REC REP	0	0	0	0	0	0	0
8528124800	RECEPTION APPARATUS FOR TV, COLOR, HIGH-DEFINITION	0	0	0	0	0	0	0
8528125200	TV REC, COLOR, HD, PROJ, CATH-RAY, W/ VIDEO REC/REP	0	0	0	0	0	0	0
8528125600	RECEPTION APPARATUS FOR TV, COLOR, HIGH DEFINITION	0	0	0	0	0	0	0
8528126201	RECEPTION APPARATUS FOR TV, CLR, W/ A FLAT PANEL SC	0	0	0	0	0	0	0
8528126401	RECEPTION APP. FR TV, COLOR, WITH A FLAT PANEL SCR	0	0	0	0	0	0	0
8528126801	RECEPTION APPARATUS FOR TV, COLOR, WITH A FLAT PAN	0	0	0	0	0	0	0
8528127201	RECEPTION APPARATUS FOR TV, COLOR, WITH A FLAT PAN	0	0	0	0	0	0	0
8528127601	RECEPTN APPAR FOR TV, COLOR, INCORPORATING VIDEO R	0	0	0	0	0	0	0
8528128001	REC TV, COLOR, VIDEO RECORD OR REPRODUCE, EXC 34.29CM	0	0	0	0	0	0	0
8528128401	RECEPTION APPARATUS FOR TELEVISION, COLOR, WITH A	0	0	0	0	0	0	0
8528129200	RECEPTION APPARATUS FOR TELEVISION, COLOR, WITH A	0	0	0	0	0	0	0
8528129300	RECEPTION APPARATUS FOR TV, COLOR, WITH A PRINTED	0	0	0	0	0	0	0
8528129700	RECEPTION APPARATUS FOR TELEVISION, COLOR, WITH A	0	0	0	0	0	0	0
8528301000	VIDEO PROJECTORS, COLOR, INCOMPLETE, NOT INCORP A	0	0	0	0	0	0	0
8528302000	VIDEO PROJECTORS, COLOR, INCOMPLETE, NOT INCORPORA	0	0	0	0	0	0	0
8528303000	VIDEO PROJECTORS, CLR, NON-HI DEF, W/CRT, W/ REC/REP	0	0	0	0	0	0	0
8528304000	VIDEO PROJECTORS, CLR, NON-HD, W/ CRT, NESOI	0	0	0	0	0	0	0
8528306000	VIDEO PROJECTORS, COLOR, HI DEFINITION W/ CRT, NESOI	0	0	0	0	0	0	0
8528306201	VIDEO PROJ, CLR, FLAT PNEL SCR, W/REC/REP, LT=34.29 CM	0	0	0	0	0	0	0
8528306401	VIDEO PROJ, CLR, FLAT PNEL SCR, W/ REC/REP GT 34.29 CM	0	0	0	0	0	0	0
8528306601	RECEPT. APP. FOR TELEVIS. VIDEO PROJ, COLOR, FLAT	0	0	0	0	0	0	0
8528306801	RECEPT. APP. FOR TELEVIS. VIDEO PROJECT, COLOR, F	0	0	0	0	0	0	0
8528307200	VIDEO PROJECTORS, COLOR, NESOI, INCORPORATING VIDE	0	0	0	0	0	0	0
8528307800	VIDEO PROJECTORS, COLOR, NESOI	0	0	0	0	0	0	0
8529900900	PRINTED CIRCUIT ASSEMBLIES, OTHER THAN TUNERS, PRI	0	0	0	0	0	0	0
8529901620	PRNT CIR ASSEMBLS, ASSEMBLS & SUBASSEMBLS OR RADAR	0	0	0	0	0	0	0
8529901640	PRINTED CIRCUIT ASSEMBLIES, ASSEMBLIES, & SUBASSEMBL	0	0	0	0	0	0	0
8529901660	PRNTD CIR ASSEMBLIES, ASSEMBLIES & SUBASSEMBLIES CO	0	0	0	0	0	0	0
8529901920	PRNTD CIR ASSEMBLS, NOT ASSEM & SUBASSEM OF RADAR	0	0	0	0	0	0	0
8529901940	PRINTED CIRCUIT ASSEMBLIES, NOT ASSEMBLIES AND SUB	0	0	0	0	0	0	0
8529901960	PRINTED CIRCUIT ASSEMBLIES, NOT ASSEMBLIES AND SUB	0	0	0	0	0	0	0
8529902600	TRANCEIVER ASSEMBLIES FOR THE APPARATUS OF SUBHEAD	0	0	0	0	0	0	0
8529903000	PARTS OF TELEVISION CAMERAS	689,460	111,512	861,078	3,519,069	5,757,997	1,463,248	722,914
8529903900	PRTS OF TELEVISION RECEIVERS, EXCEPT TUNERS, SUBAS	0	0	0	0	0	0	0
8529904720	PARTS FOR RADAR APPARATUS	513,625	1,049,806	1,246,623	930,495	1,419,592	893,016	2,565,740
8529904740	PARTS FOR RADIO NAVIGATIONAL AID APPARATUS (EXCEPT	819,568	5,077,890	1,703,111	2,696,086	2,185,268	5,074,107	11,604,167
8529904760	PARTS FOR RADIO REMOTE CONTROL APPARATUS	421,475	938,127	5,582,254	6,770,149	6,722,278	5,229,008	3,329,925
8529904900	COMBINATION OF PARTS SPECIFIED IN ADDITIONAL U.S.	0	0	0	0	0	0	0
8529906300	OTHER, PARTS OF PRINTED CIRCUIT ASSEMBLIES, INCLUDI	0	0	0	0	0	0	0
8529907300	OTHER PARTS OF PRINTED CIRCUIT ASSEMBLIES, INCLUDI	0	0	0	0	0	0	0
8529907800	MOUNTED LENSES FOR TELEVISION CAMERAS & OTHER PART	0	0	0	0	0	0	0
8529908100	OTHER PARTS OF ARTICLES OF HEADINGS 8525 AND 8527,	0	0	0	0	0	0	0
8529909520	ASSEMBLIES & SUBASSEMBLIES, OF RADAR APPARATUS	0	0	0	0	0	0	0
8529909540	ASSEMBLIES AND SUBASSEMBLIES, CONSISTING OF 2 OR MO	0	0	0	0	0	0	0
8529909560	ASSEMBLIES AND SUBASSEMBLIES, CONSISTING OF 2 OR MO	0	0	0	0	0	0	0
8529909720	OTHER PARTS OF RADAR APPARATUS, EXCEPT ASSEMBLIES	0	0	0	0	0	0	0
8529909740	OTHER PARTS OF RADIO NAVIGATIONAL AID APPARATUS (E	0	0	0	0	0	0	0
8529909760	OTHER PARTS OF RADIO REMOTE CONTROL APPARATUS, EXC	0	0	0	0	0	0	0
8534000020	PRINTED CIRCUITS HAVING A BASE OF PLASTIC IMPREGNA	54,471,220	43,762,625	56,778,731	61,826,254	67,198,162	55,123,612	53,330,634
8537109030	NUMERICAL CONTROLS FOR CONTROLLING MACHINE TOOLS	553,459	1,434,097	910,804	191,821	592,315	668,698	991,709
8537109050	PANEL BOARDS AND DISTRIBUTION BOARDS, FOR VOLTAGES	0	0	0	0	0	5,720,856	3,434,742
8537109060	PROGRAMABLE CONTROLLERS	4,642,860	6,953,845	9,189,290	11,856,097	14,311,672	23,343,074	52,009,237
8540790000	MICROWAVE TUBES, NESOI	26,500	130,552	33,200	70,300	599,725	346,117	33,314
8540890060	LIGHT-SENSING TUBES	21,420	12,839	2,655	28,611	125,285	78,269	20,400
8541100040	UNMOUNTED CHIPS, DICE, WAFERS FOR DIODES OTHER THA	9,588,852	17,656,856	8,532,207	4,202,703	20,337,882	9,909,913	12,074,485
8541100050	ZENER DIODES	940,709	184,667	586,192	418,031	416,783	1,198,681	1,764,283
8541100060	MICROWAVE DIODES	6,945,296	6,046,068	6,320,551	2,943,759	3,829,707	4,346,493	4,875,322
8541100070	DIODES, OTHER THAN PHOTSENSITIVE OR LED, WITH A MA	106,230	313,960	172,258	340,972	1,643,597	117,189	551,432
8541100080	SEMICONDUCTOR DIODES NOT PHOTSENSITIVE OR LED, WIT	7,273,198	11,094,215	8,315,473	4,951,502	6,994,732	3,876,822	4,875,944
8541210040	UNMOUNTED CHIPS, DICE, WAFERS FOR TRANSISTORS OTH	4,143,747	2,804,436	13,023,864	6,906,026	3,582,554	3,058,996	4,102,329
8541210075	TRANSISTORS OTHER THAN PHOTSENSITIVE, WITH A DISS	0	0	0	0	0	0	0
8541210080	TRANSISTORS, OTHER THAN PHOTSENSITIVE, WITH A DISS	7,197,347	11,587,827	5,852,799	6,118,432	3,556,315	2,923,596	3,150,738
8541210095	TRANSISTORS OTHER THAN PHOTSENSITIVE, WITH A DISS	0	0	0	0	0	0	0
8541290040	UNMOUNTED CHIPS, DICE AND WAFERS FOR TRANSISTORS O	99,083,683	98,097,538	116,000,000	149,000,000	130,000,000	86,741,368	69,260,866
8541290075	TRANSISTORS OTHER THAN PHOTSENSITIVE, DISSIPATION	0	0	0	0	0	0	0
8541290080	TRANSISTORS, OTHER THAN PHOTSENSITIVE, WITH A DISSI	11,697,318	13,804,725	7,265,250	5,595,927	16,890,271	27,971,123	46,112,919
8541290095	TRANSISTORS OTHER THAN PHOTSENSITIVE, DISSIPATION	0	0	0	0	0	0	0
8541300040	UNMOUNTED CHIPS, DICE & WAFERS FOR THYRISTORS, DIA	168,686	42,521	107,014	76,836	365,883	644,838	395,049
8541300080	THYRISTORS, DIACS & TRIACS, OTHER THAN PHOTSENSIT	1,816,660	618,064	1,093,404	1,947,889	1,660,873	1,250,337	2,290,903
8541406010	UNMOUNTED CHIPS, DICE OR WAFERS FOR PHOTSENSITIVE	489,719	236,165	993,139	1,005,627	1,015,306	1,658,787	3,496,768
8541406020	SOLAR CELLS ASSEMBLED INTO MODULES OR PANELS	598,354	1,098,141	3,136,139	1,819,427	768,746	844,536	7,388,600
8541406030	SOLAR CELLS, NOT ASSEMBLED INTO MODULES OR MADE UP	29,402	489,811	2,033,404	1,009,345	3,958,870	5,342,642	6,097,461
8541406050	PHOTSENSITIVE DIODES, NESOI	1,555,467	3,027,721	2,200,965	1,286,544	1,264,328	3,856,739	9,054,362

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8541407040	UNMOUNTED CHIPS, DICE AND WAFERS FOR PHOTSENSITIV	153,191	367,819	904,123	80,473	111,219	218,914	248,682
8541407080	PHOTOSENSITIVE TRANSISTERS	27,541	10,557	60,185	160,639	232,826	1,195,742	287,093
8541408000	OPTICAL COUPLED ISOLATORS	592,853	692,356	1,775,421	2,600,031	3,017,156	3,563,999	4,444,065
8541409500	PHOTOSENSITIVE SEMICONDUCTOR DEVICES, NESOI	7,436,859	15,488,190	499,785	2,403,196	2,626,393	1,653,723	4,010,206
8541500040	UNMOUNTED CHIPS, DICE, WAFERS FOR SEMICONDUCTOR DE	351,338	908,816	1,493,308	1,768,266	2,438,032	20,744,378	37,800,249
8541500080	SEMICONDUCTOR DEVICES, NESOI	913,893	7,064,905	17,067,601	3,275,796	8,908,693	11,293,366	14,763,244
8541900000	PARTS FOR DIODES, TRANSISTORS & SIMILAR SEMICONDUCT	9,617,121	16,209,170	10,720,759	21,004,986	37,448,451	22,507,690	16,128,441
8542100000	CARDS INCORP. ELEC. INTEGRATED CRCT (SMART CARDS)	0	0	14,522,749	12,679,994	10,588,375	16,271,989	19,885,588
8542120000	MONOLITHIC DIGITAL INTEGRATED CIRCUITS; CARDS INCO	6,949,512	9,172,585	0	0	0	0	0
8542134000	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, MOS TECHN	345,586	1,748,317	0	0	0	0	0
8542138005	UNMOUNTED CHIPS, DICE WAFERS OF SILICON FOR DIGITA	318,399,499	366,832,235	0	0	0	0	0
8542138010	UNMOUNTED CHIPS, DICE, & WAFERS OTHER THAN SILICON	17,342,561	118,692,332	0	0	0	0	0
8542138012	MONOLITHIC IC'S, DIGITAL, SILICON, (MOS), VOLATIL	0	3,632,310	0	0	0	0	0
8542138021	MONOLITHIC INTEGRATED CIRCUITS OF SILICON, DIGITAL	0	0	0	0	0	0	0
8542138022	MONOLITHIC INTEGRATED CIRCUITS OF SILICON, DIGITAL	0	0	0	0	0	0	0
8542138023	MONOLITHIC INTEGRATED CIRCUITS OF SILICON, DIGITAL	0	0	0	0	0	0	0
8542138024	MONOLITHIC INTEGRATED CIRCUITS OF SILICON, DIGITAL	0	0	0	0	0	0	0
8542138025	MONOLITHIC IC'S, DIGITAL, SILICON, (MOS), VOLATIL	0	10,381,536	0	0	0	0	0
8542138026	MONOLITHIC INTEGRATED CIRCUITS OF SILICON, DIGITAL	0	0	0	0	0	0	0
8542138027	MONOLITHIC IC'S, DIGITAL, SILICON, (MOS), VOLATIL	8,994,456	0	0	0	0	0	0
8542138028	MONOLITHIC IC'S, DIGITAL, SILICON, (MOS), VOLATIL	15,955,266	0	0	0	0	0	0
8542138029	MONOLITHIC INTEGRATED CIRCUITS OF SILICON, DIGITAL	0	0	0	0	0	0	0
8542138030	MONOLITHIC INTEGRATED CIRCUITS OF SILICON, DIGITAL	0	0	0	0	0	0	0
8542138031	MONOLITHIC INTEGRATED CIRCUITS OF SILICON, DIGITAL	0	0	0	0	0	0	0
8542138032	MONOLITHIC INTEGRATED CIRCUITS OF SILICON, DIGITAL	0	0	0	0	0	0	0
8542138034	MONOLITHIC INTEGRATED CIRCUITS OF SILICON, DIGITAL	0	0	0	0	0	0	0
8542138037	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	0	0	0	0	0	0	0
8542138038	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	0	0	0	0	0	0	0
8542138039	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,M	0	0	0	0	0	0	0
8542138041	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL,SILICON, M	0	0	0	0	0	0	0
8542138043	MONOLITHIC IC'S, DIGITAL, SILICON, (MOS), VOLATIL	1,329,863	94,106	0	0	0	0	0
8542138044	MONOLITHIC IC'S, DIGITAL, SILICON, (MOS), VOLATIL	696,885	5,215,638	0	0	0	0	0
8542138045	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL,SILICON, M	0	0	0	0	0	0	0
8542138049	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	0	0	0	0	0	0	0
8542138051	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	0	0	0	0	0	0	0
8542138052	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	0	0	0	0	0	0	0
8542138056	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	7,969,229	6,816,861	0	0	0	0	0
8542138057	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	0	0	0	0	0	0	0
8542138058	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL,SILICON, M	0	0	0	0	0	0	0
8542138059	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	0	0	0	0	0	0	0
8542138060	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	0	0	0	0	0	0	0
8542138061	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	710,519	651,565	0	0	0	0	0
8542138065	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	18,476,040	4,625,633	0	0	0	0	0
8542138066	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	1,214,441	6,339,327	0	0	0	0	0
8542138067	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	440,350	331,250	0	0	0	0	0
8542138068	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	11,035,968	15,789,391	0	0	0	0	0
8542138072	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	106,271,435	67,340,367	0	0	0	0	0
8542138092	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, OTHER THA	180,433	355,738	0	0	0	0	0
8542138096	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, OTHER THA	7,133,778	8,587,527	0	0	0	0	0
8542144000	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, BIPOLAR T	0	51,447	0	0	0	0	0
8542148001	UNMOUNTED CHIPS, DICE, & WAFERS OF SILICON FOR DIG	216,437	21,533,782	0	0	0	0	0
8542148002	UNMOUNTED CHIPS, DICE, & WAFERS OTHER THAN SILICON	431,524	2,810,772	0	0	0	0	0
8542148004	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	2,096,459	411,764	0	0	0	0	0
8542148007	MONOLITHIC INTEGRATED CIRCUITS OF SILICON, DIGITAL	45,022	1,008,515	0	0	0	0	0
8542148011	MONOLITHIC INTEGRATED CIRCUITS OF SILICON, DIGITAL	25,204	23,388	0	0	0	0	0
8542148012	MONOLITHIC INTEGRATED CIRCUITS OF SILICON, DIGITAL	505,746	17,410	0	0	0	0	0
8542148017	MONOLITHIC INTEGRATED CIRCUITS OF SILICON, DIGITAL	3,842,199	2,135,678	0	0	0	0	0
8542148092	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, OTHER THA	0	0	0	0	0	0	0
8542148096	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, OTHER THA	1,197,126	513,976	0	0	0	0	0
8542194000	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, OBTAINED	382,629	112,888	0	0	0	0	0
8542198001	UNMOUNTED CHIPS, DICE, & WAFERS OF SILICON FOR DIG	80,477	147,936	0	0	0	0	0
8542198002	UNMOUNTED CHIPS, DICE, & WAFERS OTHER THAN SILICON	1,009,025	1,842,577	0	0	0	0	0
8542198073	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	7,116	8,720	0	0	0	0	0
8542198078	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	65,806	688,738	0	0	0	0	0
8542198079	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	1,629,794	1,873,284	0	0	0	0	0
8542198092	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, OTHER THA	0	14,877	0	0	0	0	0
8542198096	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, OTHER THA	18,401,472	21,473,834	0	0	0	0	0
8542214000	MNLTHC IC DGTL, FOR HIGH DEF TV GT 100000 GTS	0	0	9,860,152	14,110,982	6,677,040	2,601,108	5,463,832
8542218005	CHIPS & WAFERS OF SILICON DGTL MNLTHC IC	0	0	667,000,000	1,350,000,000	1,420,000,000	1,755,248,803	3,095,151,972
8542218010	UNMTD CHP, DICE & WAFR FOR DGTL MNLTHC IC, EX SLCN	0	0	8,420,946	6,612,664	11,009,943	28,202,617	137,864,895
8542218020	MONO INTGR CRCT SLCN DGTL VLTLMEM DRAM LT-16 MB	0	0	0	0	0	0	0
8542218021	MONO IC,DIG,DRAM,NOT OVER 1,000,000 BITS	0	0	16,571,458	2,304,100	4,941,859	829,093	1,605,721
8542218022	MNLTHC IC,SLCN,DGTL,VOLTL MEMRY,DRAM, 1-8 MEGABITS	0	0	0	0	0	0	0
8542218023	MNLTHC IC,SLCN,DGTL,VOLTL MEMRY,DRAM, 8-16 MEGABIT	0	0	0	0	0	0	0
8542218024	MNLTHC IC,SLCN,DGTL,VOLTL MEMRY,DRAM,16-64 MEGABIT	0	0	0	0	0	0	0
8542218025	MNLTHC IC,SLCN,DGTL,VOLTL MEMRY,DRAM, 64-128 MEGBT	0	0	0	0	0	0	0
8542218026	MONO INT CRC SLCN DGT VLT MEM DRAM GT 128 LT-256MB	0	0	0	0	0	0	0
8542218027	MONO INT CRC SLCN DGT VLT MEM DRAM GT 256 LT-512MB	0	0	0	0	0	0	0
8542218028	MONO INT CRC SLCN DGT VLT MEM DRAM GT 512MB LT-1GB	0	0	0	0	0	0	0
8542218029	MNLTHC IC,DGTL,SI,VOLTILE MEM,DRAM, GT 128 MEGABIT	0	0	160,000,000	221,000,000	198,000,000	187,164,334	361,056,513
8542218030	MONO INTEGR CIRCT SLCN DGTL VOLTL MEM DRAM GT 1 GB	0	0	0	0	0	0	0
8542218031	MONO IC,DGTL,SILCON,VOLATIL,(SRAM)LT 256 KBITS	0	0	1,865,525	1,830,387	709,047	1,580,672	4,919,918
8542218032	MNLTHC IC,SLCN,DGTL,VOLTL MEMRY,SRAM,256KLB-2MEGB	0	0	0	0	0	0	0
8542218038	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	0	0	2,137,880	913,595	2,751,765	3,012,541	3,839,571
8542218039	MNLTHC IC,SLCN,DGTL,VOLTL MEMRY,SRAM, OVR 2MEGABIT	0	0	0	0	0	0	0
8542218041	MNLTHC IC,SLCN,DGTL,EX VOLTL,EEPROM, NT OVR 64 KLB	0	0	0	0	0	0	0
8542218042	MNLTHC IC,SLCN,DGTL,EX VOLTL,EEPROM,64-512 KILOBIT	0	0	0	0	0	0	0
8542218048	MONOLITHIC INTEG CIRCUIT, DIGITL,(EEPROM),ELEC ERAS	0	0	9,584,625	17,659,631	37,814,348	192,179,529	351,241,435
8542218049	MNLTHC IC,SLCN,DGTL,EX VOLTL,EEPROM,OVER 512KILBT	0	0	0	0	0	0	0
8542218051	MNLTHC IC,SLCN,DGTL,EX VOLTL,EPROM, NT OVR 64KLB	0	0	0	0	0	0	0
8542218052	MNLTHC IC,SLCN,DGTL,EX VOLTL,EPROM,64-512 KILOBITS	0	0	0	0	0	0	0
8542218058	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, (EPROM)	0	0	664,863	976,920	2,651,293	2,778,282	2,649,469
8542218059	MNLTHC IC,SLCN,DGTL,EX VOLTL,EPROM,OVR 512KILOBITS	0	0	0	0	0	0	0
8542218060	MONOLITHIC IC, DIGITAL, SILICON, NESOI	0	0	17,058,075	18,355,769	104,000,000	21,415,578	24,258,574
8542218071	MONO IC,DIG,SIL,(ASIC)&(PLA)MICROPROC LT 8 BITS	0	0	18,545,313	24,810,243	24,501,430	16,562,291	15,376,422

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8542218072	MONO IC,DIG,SIL,(ASIC)&(PLA)MICROPROCES 16 BITS	0		5,672,607	7,760,599	3,478,846	3,939,253	2,519,251
8542218079	MONO IC,DIG,SIL, (ASIC)&(PLA) MCRPROC GT 32BTS	0		51,560,902	49,326,101	68,554,915	98,431,609	87,050,862
8542218081	MNLTHC IC,SLCN,DIGITAL,EX MICROPROCR,TTL	0		0	0	0	0	0
8542218082	MNLTHC IC,SLCN,DGTL,EX MICROPROCR,ECL	0		0	0	0	0	0
8542218088	MONOLITHIC INTEGRAT CIRCUITS DIGITL, NT MEM,NESOI	0		79,091,108	112,000,000	239,000,000	279,697,007	468,258,212
8542218089	MNLTHC IC, SLCN, DGTL, EX MICROPROCR, NESOI	0		0	0	0	0	0
8542218091	MONOLITHIC IC,DIGITAL, MEMRY, (EXCPT SILCON, NESOI	0		3,261,401	4,262,092	1,678,560	1,622,746	1,283,976
8542218099	MONOLITHIC IC,DIGITAL, EXCPT SILCN OR DIGTL, NESOI	0		34,127,716	32,344,114	22,208,545	8,211,283	17,811,565
8542290010	CHPS,DCE,WFRS MONOLITHIC INTEGRAT CIRCUIT,EXEP DIGL	0		105,000,000	102,000,000	153,000,000	216,618,948	556,531,489
8542290020	MONOLITHIC IC'S,EXE DIGL,OPRAT FREQ GE 100MHZ,NESO	0		13,992,091	68,258,640	70,981,603	43,016,805	52,065,595
8542290030	MONOLITHIC IC, FREQUENCY LT 100 MHZ, LOGIC, NESOI	0		7,931,183	6,577,222	58,807,578	10,789,435	21,272,196
8542290040	MONOLITHIC IC,FREQ.LT100MHGZ, OTHR THN LGC, NESOI	0		47,030,204	19,854,635	28,999,981	48,303,209	82,791,899
8542290050	MONOLITHIC IC,OPERATING FREQUENCY LT 100 MHZ, NESOI	0		37,468,127	59,187,732	68,757,139	46,406,899	56,292,109
8542300040	UNMOUNTED CHIPS, DICE, WAFERS FOR MONOLITHIC INTEG	19,046,950	55,015,622					
8542300060	MONOLITHIC INTEGRATED CIRCUITS, WITH AN OPERATING	3,811,558	6,268,329					
8542300065	MONOLITHIC INTEGRATED CIRCUITS, WITH AN OPERATING	19,506,236	43,563,622					
8542300080	MONOLITHIC INTEGRATED CIRCUITS, WITH AN OPERATING	2,425,532	8,127,807					
8542300090	MONOLITHIC INTEGRATED CIRCUITS, WITH AN OPERATING	11,494,731	12,347,762					
8542400075	HYBRID INTEGRATED CIRCUITS, WITH AN OPERATING FREQ	8,141,962	10,000,656					
8542400095	HYBRID INTEGRATED CIRCUITS, NESOI	6,176,461	5,336,058					
8542500000	ELECTRONIC INTEGRATED CIRCUITS ,NESOI, AND MICROAS	10,271,426	12,152,884					
8542600075	HYBRID INTEGRATED CIRCUITS,WITH FREQUENCY GE 30MHZ	0		9,157,802	4,373,624	5,279,282	12,228,793	25,931,301
8542600095	HYBRID INTEGRATED CIRCUITS, NESOI	0		5,929,281	8,587,750	17,522,012	29,720,862	15,560,253
8542700000	ELECTRONIC MICROASSEMBLIES			7,790,164	16,037,045	29,705,244	21,398,955	86,774,499
8542900000	PARTS FOR ELECTRONIC INTEGRATED CIRCUITS AND MICRO	37,204,915	31,502,834	37,861,093	49,412,030	79,634,758	74,208,476	91,922,673
8543110000	ION IMPLANTERS DESIGNED FOR DOPING SEMICONDUCTOR W	18,462,938	11,763,379	7,779,129	33,623,330	55,702,628	42,894,597	63,548,286
8543190000	PARTICLE ACCELERATORS, NESOI	1,853,106	1,694,878	1,229,512	2,894,074	2,376,117	3,775,384	4,558,641
8543200000	SIGNAL GENERATORS	4,219,219	9,296,264	8,937,710	8,092,836	10,941,950	6,559,900	6,948,025
8543891000	PVD APPARATUS FOR PROCESS OF SEMICONDUCTOR MATS	0		46,523,808	56,083,803	183,000,000	48,358,809	69,955,589
8543892000	PHYSICAL VAPOR DEPOSITION (PVD) APPARATUS, NESOI	0		5,340,432	7,539,841	4,350,884	1,722,251	4,668,395
8544700000	INSULATED OPTICAL FIBER CABLES WITH INDIVIDUALLY S	6,942,943	9,032,731	13,300,660	8,283,699	5,827,603	6,430,271	7,289,679
8802110030	NEW HELICOPTERS, NON-MILITARY, OF AN UNLADEN WEIGH	1,755,000		1,533,135	382,989	2,302,305	2,266,871	423,144
8802110045	NEW HELICOPTERS, NON-MILITARY, UNLDN WT 998-2000KG	0		0	388,000	0	886,000	2,498,000
8802120040	NEW HELICOPTERS, NON-MILITARY, OF AN UNLADEN WEIGH	0	16,833,698	0	0	0	20,554,655	4,500,000
8802300030	NEW MULTIPLE ENGINE AIRPLANES, NON-MILITARY, OF AN	0	6,999,000	3,200,000	0	0	6,036,780	0
8802300040	NEW TURBOFAN POWERED AIRPLANES, NON-MILITARY, OF A	34,646,778	58,978,831	63,750,057	0	0	46,741,606	14,818,000
8802300050	NEW MULTI ENG PLANES,NOT TURBOFAN,(4536-15000 KG)	0		0	0	0	5,350,000	18,046,124
8802400040	NEW AIRCRAFT PASSENGER TRANSPORTS, NON-MILITARY, O	1,105,828,801	1,478,048,624	1,940,000,000	1,890,000,000	1,490,000,000	3,092,489,311	3,906,501,455
8802400060	NEW AIRCRAFT CARGO TRANSPORTS, NON-MILITARY, OF AN	318,586,013	589,979,562	1,000,000,000	0	0	442,657,188	1,073,000,483
8802603000	COMMUNICATIONS SATELLITES	0		0	0	0	0	0
8803100010	PROPELLERS AND ROTORS AND PARTS THEREOF FOR USE IN	1,633,110	4,415,455	1,493,062	1,499,321	692,116	2,503,055	7,534,827
8803100015	PROPS & RTRS & PARTS FOR CVL ARCT, FOR DOD OR USCG	0		0	0	0	0	0
8803100030	PROPELLERS AND ROTORS AND PARTS THEREOF FOR USE IN	0		0	0	0	0	0
8803100050	PROPELLERS AND ROTORS AND PARTS THEREOF FOR USE IN	4,432,883	405,050	1,660,891	2,005,918	89,617	147,629	647,668
8803100060	PROPLLRS & ROTORS & PARTS THEREOF FOR MILITARY AIR	0		0	0	0	0	0
8803200010	UNDERCARRIAGES AND PARTS THEREOF FOR USE IN CIVIL	3,910,439	4,033,689	5,695,360	6,167,223	12,691,593	18,709,443	33,603,032
8803200030	UNDERCARRIAGES AND PARTS THEREOF FOR USE IN CIVIL	0	0	0	0	0	0	0
8803200050	UNDERCARRIAGES AND PARTS THEREOF FOR USE IN MILITA	270,741	19,762	192,043	96,024	4,336,120	2,273,585	346,960
8803200060	UNDERCARRIAGES & PARTS THEREOF FOR MILITARY AIR	0		0	0	0	0	0
8803300010	OTHER PARTS OF AIRPLANES OR HELICOPTERS FOR USE IN	206,542,211	256,410,782	249,000,000	264,000,000	308,000,000	511,661,628	719,882,845
8803300015	OTHER PARTS OF AIRPLANES OR HELICOPTERS, NESOI, FO	0		0	0	0	0	0
8803300030	OTHER PARTS OF AIRPLANES OR HELICOPTERS, NESOI, FO	0		0	0	0	0	0
8803300050	OTHER PARTS OF AIRPLANES OR HELICOPTERS FOR USE IN	1,226,285	1,349,644	4,093,233	5,344,630	2,648,393	5,275,728	2,355,144
8803300060	OTHER PARTS OF AIRPLANES OR HELICOPTERS FOR USE IN	0		0	0	0	0	0
8803903000	PARTS OF COMMUNICATIONS SATELLITES	0	96,234	108,304	283,257	230,722	697,595	269,294
8805200000	GROUND FLYING TRAINERS AND PARTS THEROF	3,892,425	849,432					
8805210000	AIR COMBAT SIMULATORS AND PARTS THEREOF	0		0	26,500	79,910	72,920	53,000
8805290000	GROUND FLYING TRAINERS AND PARTS THEREOF, NESOI	0		13,010,206	524,271	316,022	659,327	367,259
9001100000	OPTICAL FIBERS, OPTICAL FIBER BUNDLES AND CABLES E	20,262,175	47,480,974	3,439,906	5,127,902	3,059,155	5,484,464	20,989,137
9001100030	OPTICAL FIBERS FOR TRANSMISSION OF VOICE, DATA OR	0	0	0	0	0	0	0
9001100070	OPTICAL FIBERS EXCEPT OF PLASTIC, NESOI	0	0	0	0	0	0	0
9001100085	OPTICAL FIBERS BUNDLES AND CABLE OTHER THAN THOSE	0	0	0	0	0	0	0
9001901000	LENSES, PRISMS, AND MIRRORS, UNMOUNTED, NESOI	3,063,323	2,052,844	2,379,860	2,295,489	3,627,856		
9001904000	LENSES, UNMOUNTED, NESOI	0	0	0	0	0	0	0
9001905000	PRISMS, UNMOUNTED, NESOI	0	0	0	0	0	0	0
9001906000	MIRRORS, UNMOUNTED, NESOI	0	0	0	0	0	0	0
9001909000	OPTICAL ELEMENTS, UNMOUNTED, NESOI	0	0	0	0	0	0	0
9002902000	PRISMS MOUNTED, NESOI	0	0	0	0	0	0	0
9002904000	MIRRORS MOUNTED, NESOI	0	0	0	0	0	0	0
9002909500	OPTICAL ELEMENTS, NESOI	0	0	0	0	0	0	0
9005100020	PRISM BINOCULARS FOR USE WITH INFRARED LIGHT	20,062	0	0	29,559	341,855	36,491	0
9005804020	OPTICAL TELESCOPES FOR USE WITH INFRARED LIGHT	0	0	15,585	3,730	354,028	11,100	8,892
9005804040	OPTICAL TELESCOPES EXCEPT FOR USE WITH INFRARED LI	41,299	86,460	36,926	280,170	257,533	375,841	770,534
9006610040	DISCHARGE LAMP AND FLASHLIGHT APPARATUS CAPABLE OF	0	0	0	0	0	0	0
9007914000	PARTS FOR CAMERAS	0	0	0	0	0	0	0
9010410000	DIRECT WRITE-ON-WAFER APPARATUS	0		0	65,000	39,776	52,122	13,368
9010410040	E-BEAM DIRECT WRITE WAFER, PROJTN OF CIRCUIT PATRN	0		0	0	0	0	0
9010410080	DIRECT WRT WAFER APPT, FOR PROJ OF CIRCUIT, NESOI	0		0	0	0	0	0
9010420000	STEP AND REPEAT ALIGNERS	1,138,000		515,199	607,451	1,093,875	101,730	3,597,864
9010490000	APPARATUS FOR THE PROJECTION OF CIRCUIT PATRNS NES	273,420	670,472	873,615	89,705	2,012,590	3,213,351	4,107,999
9011100000	STEREOSCOPIC MICROSCOPES	1,093,081	404,893	211,325	595,828	1,008,443	435,426	487,179
9011104000	STEREOSCOPIC MICROSCOPES WITH MEANS TO PHOTO IMAGE	0		0	0	0	0	0
9011108000	STEREOSCOPIC MICROSCOPES, NESOI	0		0	0	0	0	0
9011200000	MICROSCOPES, FOR MICROPHOTOGRAPHY&CINEMA ETC,NESOI	135,922	208,632	145,587	157,726	384,657	98,570	693,491
9011204000	MICROSCOPES, WITH MEANS TO PHOTOGRAPH THE IMAGE	0		0	0	0	0	0
9011208000	MICROSCOPES, EXC WITH MEANS TO PHOTOGRAPH IMAGE	0		0	0	0	0	0
9011800000	OTHER COMPOUND OPTICAL MICROSCOPES, NESOI	230,878	1,295,931	1,168,908	437,659	482,924	1,476,953	917,595
9011900000	PARTS AND ACCESSORIES FOR COMPOUND OPTICAL MICROSC	745,095	1,418,594	632,683	569,933	537,879	673,381	2,018,804
9012100000	MICROSCOPES OTHER THAN OPTICAL MICROSCOPES; DIFFRA	2,338,502	1,995,410	2,173,503	5,404,932	5,439,820	9,647,900	9,294,344
9012900000	PARTS AND ACCESSORIES FOR MICROSCOPES OTHER THAN O	569,272	3,080,300	2,766,664	4,700,467	2,010,180	2,557,429	1,353,193
9013103000	TELESCOPIC SIGHTS FOR RIFLE, NESOI	0	0	0	0	0	0	0
9013104000	PERISCOPIES, TELESCOPES DESIGNED TO FORM PARTS OF M	14,770	37,513	52,484	14,033	8,400	240,344	21,685
9013200000	LASERS, OTHER THAN LASER DIODES	6,547,673	12,472,437	24,921,296	20,834,419	25,199,330	27,932,304	34,407,417
9013800000	OPTICAL DEVICES, APPLIANCES AND INSTRUMENTS, NESOI	8,321,931	5,873,729	3,864,701	8,756,018	5,056,448	16,261,965	9,367,202
9014101000	OPTICAL DIRECTION FINDING COMPASSES	0	0	0	0	0	0	0

## US Exports of Advanced Technology Products to China

HS Code	Commodity Description	2000	2001	2002	2003	2004	2005	2006
9014106040	GYROSCOPIC COMPASSES, OTHER THAN ELECTRICAL FOR US	0	40,200	0	0	3,354		
9014106080	GYROSCOPIC COMPASSES, EXC ELEC, EXC CIVIL AIRCRAFT	0				4,230		
9014107030	GYROSCOPIC ELECTRICAL DIRECTION FINDING COMPASSES	0	0	0	0	0	0	0
9014107040	GYROSCOPIC COMPASSES, ELECTRICAL FOR USE IN CIVIL	54,639	65,330	43,276	91,436	36,327	33,804	86,435
9014107060	OTHER ELECTRICAL DIRECTION FINDING COMPASSES	0	0	0	0	0	0	0
9014107080	GYROSCOPIC COMPASSES, ELECTRICAL, EXCEPT FOR USE I	307,605	199,396	1,328,342	323,458	4,507	37,721	6,293
9014109080	DIRECTION FINDING COMPASSES, EXCEPT FOR USE IN CIV	39,182		5,345	11,290			
9014202000	OPTICAL INSTRUMENTS AND APPLIANCES FOR AERONAUTICA	313,938	253,083	79,377	84,903	83,555	16,952	221,522
9014204000	AUTOMATIC PILOTS FOR AERONAUTICAL OR SPACE NAVIGAT	2,282,615	6,177,954	1,945,437	2,729,898	879,037	1,935,593	1,167,397
9014206000	ELECTRICAL INSTRUMENTS AND APPLIANCES FOR AERONAUT	1,087,467	3,488,121	770,641	1,367,093	1,620,754	2,276,698	3,528,888
9014208040	INSTRUMENTS AND APPLIANCES FOR USE IN CIVIL AIRCRA	4,743,319	4,353,859	4,056,585	4,998,598	5,848,347	6,916,561	8,575,591
9014208080	INSTRUMENTS AND APPLIANCES FOR AERONAUTICAL OR SPA	30,910	37,910	637,951	13,134	160,476	109,678	250,088
9014801000	OTHER OPTICAL INSTRUMENTS FOR NAVIGATION, NESOI	0	0	0	0	0	0	0
9014802000	SHIP LOGS AND DEPTH-SOUNDING APPARATUS FOR NAVIGA	210,017	164,735	259,311	488,965	447,873	59,938	87,495
9014804000	OTHER ELECTRICAL INSTRUMENTS AND APPLIANCES FOR NA	0	0	0	0	0	0	0
9014805000	OTHER NAVIGATIONAL INSTRUMENTS AND APPLIANCES, NES	0	0	0	0	0	0	0
9014900000	PARTS & ACCESSORIES FOR DIRECTION FINDING COMPASSE	3,899,917	3,472,416	2,689,193	2,172,367	1,405,806		
9014902080	PARTS AND ACCESSORIES FOR NAVIGATIONAL INSTRUMENTS	0	0	0	0	0	0	0
9014904000	PARTS AND ACCESSORIES FOR NAVIGATIONAL INSTRUMENTS	0	0	0	0	0	0	0
9014906000	PARTS AND ACCESSORIES FOR NAVIGATIONAL INSTRUMENTS	0	0	0	0	0	0	0
9015100000	RANGEFINDERS	980,478	1,384,710	100,750	14,498	1,679,423	875,548	1,329,310
9015104000	ELECTRICAL RANGEFINDERS	0	0	0	0	0	0	0
9015108000	RANGEFINDERS, EXCEPT ELECTRICAL	0	0	0	0	0	0	0
9015204000	ELECTRICAL THEODOLITES AND TACHYMETERS	0	0	0	0	0	0	0
9015304000	ELECTRICAL SURVEYING LEVELS	0	0	0	0	0	0	0
9015400000	PHOTOGRAMMETRICAL SURVEYING INSTRUMENTS & APPLNCS	0	0	0	0	0	393,658	135,307
9015404000	ELECTRICAL PHOTOGRAMMETRICAL SURVEYING INSTRUMENTS	0	0	0	0	0	0	0
9015408000	PHOTOGRAMMETRICAL SURVEYING INSTRUMENTS AND APPLIA	0	0	0	0	0	0	0
9015802000	OPTICAL INSTRUMENTS AND APPLIANCES FOR SURVEYING	278,710	1,381,903	327,871	365,999	441,786	770,225	912,361
9015806000	SEISMOGRAPHS	0	0	0	0	0	0	0
9015808040	GEOPHYSICAL INSTRUMENTS AND APPLIANCES, NESOI	29,699,059	32,693,531	22,708,221	47,632,338	41,856,856	30,084,394	52,167,064
9015808080	OTHER SURVEYING INSTRUMENTS AND APPLIANCES, EXCLUD	4,836,545	5,011,611	8,842,324	5,485,140	9,846,536	12,954,401	10,730,943
9015900000	PARTS AND ACCESSORIES FOR SURVEYING	6,170,665	10,844,342	7,549,038	20,101,741	18,328,599		
9017205000	PATTERN GENERATION APPTS DESIGNED TO PRODUCE MASKS	631,206	7,502,561	3,334,955	903,706	4,967,527	9,055,236	6,477,233
9017207000	OTHER DRAWING, MARKING-OUT OR MATHEMATICAL CALCULA	0	0	0	0	0	0	0
9017208040	HAND OPERATED INPUT DEVICES WHICH TRANSMIT POSITIO	1,107,317	4,072,280	5,399,397	9,896,497	5,367,873	5,535,850	4,726,568
9018110040	ELECTROCARDIOGRAPHS	2,925,956	6,390,990	3,820,437	1,372,046	1,553,578	4,595,734	2,780,414
9018113000	ELECTROCARDIOGRAPHS	0	0	0	0	0	0	0
9018116000	PRINTED CIRCUIT ASSEMBLIES FOR ELECTROCARDIOGRAPHS	0	0	0	0	0	0	0
9018119000	PARTS AND ACCESSORIES FOR ELECTROCARDIOGRAPHS,NESOI	0	0	0	0	0	0	0
9018120000	ULTRASONIC SCANNING APPARATUS	21,823,935	29,133,958	25,582,824	49,353,971	62,018,393	65,933,512	68,327,370
9018130000	ELECTRO-DIAGNOSTIC APPARATUS, MAGNETIC RESONANCE	23,351,646	29,441,968	19,768,895	20,385,180	26,957,244	49,527,529	22,284,742
9018140000	ELECTRO-DIAGNOSTIC APPARATUS, SCINTIGRAPHIC APPARA	1,958,672	1,916,711	2,308,802	2,387,178	4,869,013	6,512,516	3,022,647
9018194000	ELECTRO-DIAGNOSTIC APPARATUS FOR FUNCTIONAL EXPLOR	6,116,301	5,792,487	8,907,740	20,326,862	20,119,828	17,644,150	16,542,327
9018195500	PATIENT MONITORING SYSTEMS	9,862,222	18,150,448	14,682,420	20,870,529	16,771,439	16,521,623	13,643,508
9018197500	PRINTED CIRCUIT ASSEMBLIES FOR PARAMETER ACQUISITI	264,032	134,120	483,313	437,021	3,015,423	1,536,352	3,931,712
9018199535	ELECTROENCEPHALOGRAPHYS (EEG) AND ELECTROMYOGRAPHYS	1,316,532	884,976	1,087,276	1,338,356	1,157,469	3,315,867	4,385,077
9018199550	OTHER ELECTRO-DIAGNOSTIC APPARATUS, NESOI	3,851,022	2,639,836	1,584,447	5,457,797	13,524,338	15,406,475	14,746,786
9018199560	PART AND ACCESSORIES FOR ELECTRO-DIAGNOSTIC APPARA	12,069,077	16,751,859	22,183,230	23,075,765	19,359,462	28,091,274	31,379,726
9018500000	OTHER OPHTHALMIC INSTRUMENTS AND APPLIANCES AND PA	8,011,233	6,074,997	8,306,631	12,802,231	19,882,622	17,246,414	9,452,786
9018901500	OPTICAL INSTRUMENTS AND APPLIANCES AND PARTS AND A	818,676	3,042,768	742,399	832,601	2,517,266	4,696,712	1,211,830
9018903000	ANESTHETIC INSTRUMENTS AND APPLIANCES AND PARTS AN	3,584,617	5,319,618	4,350,806	3,329,983	5,936,095	7,262,638	6,211,795
9018906000	ELECTRO-SURGICAL INSTRUMENTS AND APPLIANCES AND PA	8,064,740	12,040,839	9,121,620	7,891,651	10,478,052	13,684,045	20,657,972
9018906400	DEFIBRILLATORS	0	0	0	0	0	0	0
9018906800	PRINTED CIRCUIT ASSEMBLIES FOR DEFIBRILLATORS OF S	0	0	0	0	0	0	0
9018907040	ULTRASONIC THERAPEUTIC APPLIANCES AND INSTRUMENTS	56,104	10,154	113,629	24,013	16,600	84,948	77,729
9018907060	OTHER THERAPEUTIC APPLIANCES AND INSTRUMENTS, EXCE	171,993	1,324,654	1,151,944	2,783,458	2,074,087	2,833,933	2,963,890
9018907080	ELECTRO-MEDICAL INSTRUMENTS AND APPLIANCES AND PAR	2,701,285	3,118,175	7,114,588	5,831,728	6,559,103	18,460,876	21,186,150
9018907540	ULTRASONIC THERAPEUTIC APPLIANCES AND INSTRUMENTS	0	0	0	0	0	0	0
9018907560	OTHER THERAPEUTIC APPLIANCES AND INSTRUMENTS, EXCE	0	0	0	0	0	0	0
9018908000	OTHER INSTRUMENTS AND APPLIANCES USED IN MEDICAL,	0	0	0	0	0	0	0
9019102000	MECHANO-THERAPY APPLIANCES AND MASSAGE APPARATUS;	552,825	1,175,522	879,347	898,929	1,014,492		
9019102010	MECHANO-THERAPY APPLIANCES	0	0	0	0	0	0	0
9019102020	MASSAGE APPARATUS; ELECTRICALLY OPERATED; BATTERY	0	0	0	0	0	0	0
9019102030	MASSAGE APPARATUS; ELECTRICALLY OPERATED; BATTERY	0	0	0	0	0	0	0
9019102035	MASSAGE APPARATUS, POWERED BY AC ADAPTER	0	0	0	0	0	0	0
9019102045	MASSAGE APPARATUS,ELECTRICALLY OPERATED (EXCEPT BA	0	0	0	0	0	0	0
9019102050	MASSAGE APPARATUS NOT ELECTRICALLY OPERATED	0	0	0	0	0	0	0
9019102090	MECHANO-THERAPY APPLIANCES AND MASSAGE APPARATUS;	0	0	0	0	0	0	0
9019106000	PSYCHOLOGICAL APTITUDE TESTING APPARATUS AND PARTS	0	0	0	0	0	0	0
9019200000	OZONE THERAPY, OXYGEN THERAPY, AEROSOL THERAPY, AR	3,331,765	3,983,432	4,053,477	6,888,579	6,638,284	4,682,544	15,349,870
9021100090	ORTHOPEDIC OR FRACTURE APPLIANCES & PTS, NESOI	0	0	921,580	853,123	604,107	626,666	634,546
9021110000	ARTIFICIAL JOINTS AND PARTS AND ACCESSORIES	1,137,262	1,978,373					
9021198500	OTHER ORTHOPEDIC OR FRACTURE APPLIANCES AND PARTS	136,204	242,501					
9021300000	OTHER ARTIFICIAL PARTS OF THE BODY AND PARTS AND AC	222,393	279,192					
9021310000	ARTIFICIAL JOINTS AND PARTS AND ACCESSORIES	0	0	2,330,312	3,214,007	5,584,552	12,195,476	12,407,971
9021390000	OTH ARTIFICIAL PTS OF THE BODY & PTS & ACCESSORIES	0	0	984,492	4,101,388	9,613,799	9,141,370	19,913,608
9021400000	HEARING AIDS, EXCLUDING PARTS AND ACCESSORIES	126,103	484,635	1,724,185	1,475,562	1,556,197	2,691,387	4,410,011
9021500000	PACEMAKERS FOR STIMULATING HEART MUSCLES, EXCLUDIN	53,172	16,959	13,518	22,200	321,560	638,351	410,304
9021904080	PARTS AND ACCESSORIES FOR PACEMAKERS FOR STIMULATI	0	0	0	0	0	0	0
9022120000	APPRTUS BASED USE OF X-RAYS FOR MEDICAL, SURGICAL,	11,876,455	21,709,308	19,128,798	18,839,678	20,387,223	45,809,483	36,602,448
9022130000	APPARATUS BASED ON THE USE OF X-RAYS FOR MEDICAL,	865,603	43,288	142,911	212,262	359,700	611,536	611,678
9022140000	APPARATUS BASED ON THE USE OF X-RAYS FOR MEDICAL,	22,038,974	70,044,186	52,460,023	99,881,340	64,141,535	62,574,446	56,649,054
9022190000	APPARATUS BASED ON THE USE OF X-RAYS FOR OTHER USE	15,483,513	12,028,582	1,636,421	7,089,289	11,359,718	9,082,152	25,485,088
9022210000	APPARATUS BASED ON THE USE OF ALPHA, BETA OR GAMMA	1,187,786	2,137,057	2,537,122	3,417,103	1,728,442	5,544,014	2,910,657
9022298000	APPARATUS BASED ON THE USE OF ALPHA, BETA OR GAMMA	522,272	1,130,473	1,326,116	1,445,399	2,598,144	3,613,980	5,941,913
9022300000	X-RAY TUBES	12,721,392	14,212,460	15,324,676	17,748,181	20,013,860	18,256,311	19,158,222
9022900500	RADIATION GENERATOR UNITS	0	0	0	0	0	0	0
9022902000	HIGH TENSION GENERATORS, CONTROL PANELS, DESKS, SC	205,893	1,415,557	891,344	1,285,599	1,100,919	1,424,736	1,670,379
9022904000	PARTS AND ACCESSORIES OF X-RAY TUBES	62,507	182,919	833,346	1,640,618	1,398,275	2,411,369	1,940,114
9022907000	PARTS AND ACCESSORIES OF SMOKE DETECTORS, IONIZATI	0	0	0	0	0	0	0
9022909500	PARTS AND ACCESSORIES OF HIGH TENSION GENERATORS,	0	0	0	0	0	0	0
9024100000	MACHINES AND APPLIANCES FOR TESTING METALS	3,993,607	4,630,612	11,850,448	10,490,780	13,556,530	11,965,344	22,976,629
9024800000	OTHER MACHINES AND APPLIANCES FOR TESTING THE HARD	17,938,012	24,292,812	25,134,614	37,529,022	43,091,753	53,174,972	43,820,288
9024900000	PARTS AND ACCESSORIES FOR MACHINES & APPLIANCES FO	6,969,961	11,240,920	15,164,697	27,109,479	26,972,435	21,382,942	32,059,315

US Exports of Advanced Technology Products to China

HS Code	Commodity Description	2000	2001	2002	2003	2004	2005	2006
9027202000	GAS CHROMATOGRAPHS	2,795,051	9,224,418	18,663,969	13,333,688	24,789,698	28,893,268	26,122,262
9027205030	ELECTRICAL ELECTROPHORESIS INSTRUMENTS	7,743,754	4,322,363	2,307,779	12,075,685	11,275,908	13,955,198	14,562,211
9027206050	LIQUID CHROMATOGRAPHS	2,483,174	5,826,219	2,928,865	4,208,858	9,417,574	9,585,937	15,172,724
9027209000	CHROMATOGRAPHS AND ELECTROPHORESIS INSTRUMENTS, NE	831,595	1,349,251	1,959,570	1,466,423	5,678,718	4,211,641	7,535,680
9027308020	SPECTROSCOPES, EXCEPT ELECTRICAL USING OPTICAL RAD	11,962	98,000	28,500	48,914	5,500	0	0
9027502000	THERMAL ANALYSIS INSTRUMENTS AND APPARATUS	5,658,894	7,295,587	5,009,652	9,364,380	9,986,157	16,240,569	14,152,516
9027504050	ELECTRICAL PHOTOMETERS USING OPTICAL RADIATIONS	137,494	205,765	501,181	484,145	845,771	2,098,792	3,943,273
9027505000	OTHER CHEMICAL ANALYSIS INSTRUMENTS AND APPARATUS,	3,118,475	6,192,805	8,257,681	9,354,527	26,012,654	30,377,451	36,467,460
9027509000	INSTRUMENT AND APPARATUS FOR PHYSICAL OR CHEMICAL	4,710,792	14,518,065	10,735,698	14,476,580	16,246,722	22,129,032	25,381,746
9027801000	NUCLEAR MAGNETIC RESONANCES INSTRUMENTS AND APPARA	754,792	2,011,568	1,087,232	1,618,768	1,669,127	1,845,107	1,714,784
9027802000	MASS SPECTROMETERS	2,390,008	9,648,647	13,023,075	17,287,049	24,649,466	24,312,372	42,532,955
9027803100	ELECTROCHEMICAL INSTRUMENTS AND APPARATUS,	3,375,744	3,919,593	4,178,334	5,516,584	3,800,214	7,274,024	8,463,641
9027803200	CHEMICAL ANALYSIS INSTRUMENTS AND APPARATUS, NESOI	7,045,117	13,885,599	13,298,146	11,504,593	11,182,382	14,652,071	14,344,912
9027808000	INSTRUMENTS AND APPARATUS FOR MEASURING/CHECKING V	11,433,152	14,259,497	14,868,447	20,812,677	20,638,755	18,788,123	22,471,345
9027902000	MICROTOMES	251,644	27,539	107,767	281,847	141,531	873,198	1,742,420
9027905430	PARTS AND ACCESSORIES OF ELETRICAL INSTRUMENTS AND	1,382,877	1,680,424	1,218,890	1,562,272	5,898,984	13,694,238	7,490,967
9027905440	PARTS AND ACCESSORIES OF ELETRICAL INSTRUMENTS AND	6,024	72,175	238,631	151,488	749,522	1,318,706	546,988
9027908950	PARTS AND ACCESSORIES OF INSTRUMENTS & APPARATUS F	13,331,096	32,627,936	28,975,006	38,937,226	34,610,219	51,460,986	67,698,928
9029206000	STROBOSCOPES	0	8,187	21,092	84,318	128,120	136,936	174,743
9030100000	INSTRUMENTS AND APPARATUS FOR MEASURING OR DETECTI	3,984,606	7,652,841	6,313,487	5,425,295	5,410,949	9,208,514	15,449,291
9030200000	CATHODE-RAY OSCILLOSCOPES AND CATHODE-RAY OSCILLOG	8,219,639	10,767,873	5,017,850	3,552,910	3,035,293	5,063,068	1,814,559
9030310000	MULTIMETERS	4,390,169	5,400,605	5,120,295	4,403,972	5,186,104	4,584,043	4,769,298
9030390040	APPARATUS TO TEST VOLTAGE OR CURRENT OR RESISTANCE	6,704,045	13,043,580	12,555,221	17,051,258	17,075,496	27,902,346	36,148,308
9030390080	OTHER INSTRUMENTS AND APPARATUS FOR MEASURING OR C	10,596,592	16,154,966	13,394,147	10,816,508	16,193,910	18,917,071	20,261,359
9030400000	OTHER INSTRUMENTS AND APPARATUS, SPECIALLY DESIGNE	28,026,808	77,304,868	46,674,553	41,940,799	68,014,545	50,593,644	57,715,548
9030820000	INSTR AND APPAR FOR MEASURING OR CHECKING SEMICOND	38,753,385	32,512,585	52,610,302	54,718,880	132,000,000	103,401,892	191,332,109
9030906400	PRINTED CIRCUIT ASSEMBLIES OF INSTRUMENTS AND APPA	0	0	0	0	0	0	0
9030906800	PRINTED CIRCUIT ASSEMBLIES EXCEPT FOR 9030.10,NESO	0	0	0	0	0	0	0
9031410000	OPTICAL INSTRUMENTS FOR INSPECTING SEMICONDUCTOR	18,290,773	34,282,128	52,845,847	45,908,594	110,000,000	76,832,966	116,449,020
9031410020	OPTICAL INSTRUMENTS AND APPLIANCES FOR INSPECTING	0	0	0	0	0	0	0
9031410040	OTHER OPTICAL INSTRUMENTS AND APPLIANCES FOR INSPE	0	0	0	0	0	0	0
9031410060	OPTICAL INSTRUMENTS AND APPLIANCES FOR INSPECTING	0	0	0	0	0	0	0
9031494000	COORDINATE-MEASURING MACHINES	0	0	5,029,152	9,450,054	12,176,943	15,134,734	17,960,595
9031804000	ELECTRON BEAM MICROSCOPES FITTED WITH EQUIPMENT SP	0	0	0	0	0	0	0
9031808060	EQUIPMENT FOR TESTING ELECTRICAL CHARACTERISTICS O	4,242,761	4,103,021	3,961,004	7,772,396	10,251,483	13,861,568	11,288,827
9031900000	PARTS & ACCESSORIES OF MACHINES, NESOI IN THIS CHA	8,400,624	11,841,611	16,479,613	19,491,653	33,997,118	38,124,726	44,010,867
9032100000	THERMOSTATS	2,440,796	905,505	2,140,878	4,456,426	5,408,525	5,154,223	3,144,448
9032100030	THERMOSTATS, AIR COND, REFG/HEATING SYS WALL MOUNT	0	0	0	0	0	0	0
9032100060	THERMOSTATS AIR COND, REFG/HEAT SYS EXC WALL MOUNT	0	0	0	0	0	0	0
9032100090	THERMOSTATS, NESOI	0	0	0	0	0	0	0
9032810040	HYDRAULIC OR PNEUMATIC INDUSTRIAL PROCESS CONTROL	606,870	901,493	2,705,515	715,234	3,647,238	3,868,859	4,689,935
9032810080	HYDRAULIC AND PNEUMATIC INSTRUMENTS AND APPARATUS	1,165,256	1,140,480	1,869,870	1,948,798	2,129,685	2,029,383	4,778,566
9032893000	AUTOMATIC VOLTAGE AND VOLTAGE-CURRENT REGULATORS	905,595	615,705	8,346,381	2,541,343	3,288,352	2,245,195	5,483,743
9032896020	CONTROL INSTRUMENTS FOR AIR CONDITIONING, REFRIGER	1,524,808	2,597,414	5,109,760	6,163,238	5,734,321	7,259,627	12,293,485
9032896030	PROCESS CONTROL INSTRUMENTS AND APPARATUS FOR COMP	7,508,034	10,986,156	7,704,565	10,387,031	11,652,477	7,556,857	8,681,148
9032896040	PROCESS CONTROL INSTRUMENTS AND APPARATUS FOR TEMP	895,671	1,288,601	2,213,347	3,149,208	3,766,477	4,053,485	7,228,322
9032896050	PROCESS CONTROL INSTRUMENTS AND APPARATUS FOR PRES	168,295	532,851	932,465	1,481,329	3,553,066	6,109,598	8,680,572
9032896060	PROCESS CONTROL INSTRUMENTS AND APPARATUS FOR FLOW	539,955	589,095	2,634,379	1,952,960	3,537,221	3,754,709	7,296,136
9032896070	PROCESS CONTROL INSTRUMENTS AND APPARATUS FOR HUMI	7,500	98,260	5,000	1,109,672	172,442	344,896	377,795
9032896075	OTHER PROCESS CONTROL INSTRUMENTS AND APPARATUS, N	5,727,916	7,332,441	12,370,788	16,747,503	9,696,375	8,808,870	10,774,694
9301200000	ROCKET LAUNCHERS & SIMILAR PROJECTORS (MIL)	0	0	0	8,296	0	0	0
9304002000	RIFLES WHICH EJECT MISSILES BY RELEASE OF COMPRESSE	0	0	0	0	0	0	0
9304006000	OTHER ARMS, EXCLUDING THOSE OF HEADING 9307, NESOI	0	0	0	0	0	0	0
9305108000	PARTS AND ACCESSORIES OF REVOLVERS AND PISTOLS, NE	0	0	0	0	0	0	0
9305905000	PARTS AND ACCESSORIES FOR ARTICLE OF SUBHEADING 93	0	0	0	0	0	0	0
9305995000	PARTS FOR SUBHEADING 9304.00.20 OR 9304.00.40	0	0	0	0	0	0	0
9306308000	PARTS OF CARTRIDGES, NESOI	0	55,130	20,952	20,107	40,163	39,789	30,708
9306900020	GUIDED MISSILES	0	0	0	0	0	36,600	0
9306900040	BOMBS, GRENADES, TORPEDOS, & SIML MUNITIONS OF WAR	0	0	0	0	0	0	0
9306900060	PARTS FOR GUIDED MISSILES	1,044,620	22,880	0	0	4,575,250	0	0
9306900080	PARTS FOR BOMBS, GRENADES, & SIML MUNITIONS OF WAR	0	0	0	0	0	10,291	0
9810006000	INST & APPRPTS NT MFGR IN USA FOR NONPROFIT INST	0	0	0	0	0	0	0

US Department of Commerce, Bureau of the Census and MBG Information Services

## US Imports of Advanced Technology Products From China

HS Code	Commodity Description	2000	2001	2002	2003	2004	2005	2006
	<b>Totals</b>	\$12,474,254,042	\$13,364,482,746	\$20,098,204,697	\$29,361,203,695	\$45,692,237,262	\$59,252,295,392	\$72,708,770,256
2844200020	URANIUM FLUORIDE ENRICHED IN U235		10,799,667	94,662,489	99,312,061	72,942,160	72,941,994	48,112,459
2844302060	URANIUM COMPOUNDS DEPLETED IN U235, NESOI			0	0	0	0	0
2844305000	MIXTURES CONTAIN URANIUM DEPLETED IN U235, NESOI			0	0	0	0	0
2844400010	ELEMENTS, ISOTOPES AND COMPOUNDS WITH COBALT-60 RA	0	0	0	0	0	0	0
2844400020	RADIOACTIVE ELEMENTS, ISOTOPES AND COMPOUNDS OTHER	733,151	1,481,070	932,434	309,557	2,556	0	2,936
2844400050	ALLOYS, DISPERSIONS, CERAMIC PRODUCTS & MIXTURES C	0	50,763	470,790	899,706	1,439,227	877,597	1,798,253
2845900000	ISOTOPES, EXCEPT THOSE OF HDG 2844; COMPOUNDS, INO	639,478	761,674	2,666,615	3,750,510	2,946,646	2,920,213	2,818,056
2914692000	QUINONE DRUGS	21,805	12,135	8,075	28,000	0	9,574,549	6,303,551
2918903000	AROMATIC DRUGS	5,532	12,307	13,750	88,331	109,053	167,199	166,098
2921460000	AMFETAMINE, BENZFETAMINE(INN) ETC & SALTS THEREOF						0	0
2921494300	AROMATIC MONOAMINE DRUGS, NESOI	276,641	37,500	37,500	74,980	20,594	28,894	20,300
2922190900	AROMATIC AMINO-ALCOHOLS,ETC USED AS DRUGS,NESOI			93,250	86,634	51,315	97,154	27,806,086
2922191800	OTHER AROMATIC AMINO-ALCOHOLS, THEIR ETHERS AND ES	47,021	49,086					
2922292700	AMINO-NAPHTHOLS AND AMINO-PHENOLS,ETC USED AS DRUG	259,050	153,920	331,596	613,391	169,426	338,847	165,943
2922492600	AROMATIC AMINO-ACIDS ETC FOR USE AS DRUGS			686,296	1,566,633	1,489,162	1,422,574	1,245,781
2922492700	AROMATIC AMINO-ACIDS AND THEIR ESTERS,OTHER THAN T	280,776	467,665					
2922501400	OTHER AROMATIC CARDIOVASCULAR DRUGS	36,000	46,602	63,550	66,442	66,687	71,755	136,398
2922502500	OTHER AROMATIC AMINO-ALCOHOL-PHENOL DRUGS	35,665	21,301	769,169	970,744	1,132,421	1,861,380	3,259,614
2924296250	OTHER AROMATIC CYCLIC AMIDES AND DERIVATIVES FOR U	234,493	1,151,489	574,522	1,980,627	4,698,920	5,782,741	1,620,646
2928003000	NON-AROM ORGAN DERIV OF HYDRAZINE ETC USED AS DRUG					0	0	0
2930909030	OTHER NON-AROMATIC ORGANO-SULFUR COMPOUNDS USED PR	13,103		0	24,698	125,982	76,659	70,788
2930909035	OTHER NON-AROMATIC ORGANO-SULFUR COMPOUNDS USED AS	824,635	456,192	411,571	1,089,357	78,591	55,414	107,668
2931002200	AROMATIC ORGANO-INORGANIC COMPOUNDS USED AS DRUGS	902,400	541,440	541,440	1,148,304	695,310	892,584	1,016,844
2932191000	AROMATIC COMPOUNDS CONTAINING AN UNFUSED FURAN RIN	135,039	60,808	41,760	58,194	61,594	187,304	793,156
2932292000	AROMATIC LACTONES USED AS DRUGS	63,590	53,061	46,243	58,224	60,799	161,649	151,914
2932910000	ISOSAFROLE			0	0	0	0	0
2932920000	1-(1,3-BENZODIAXOL-5-YL)PROPAN-2-ONE			0	0	5,600		
2932950000	TETRAHYDROCANNABINOLS (ALL ISOMERS)						0	0
2932995500	BIS-O-[(4-METHYL PHENYL)-METHYLENE]-D-GLUCITOL (DI	553,919	169,514	0	0	957,120	27,535	55,900
2932996550	AROMATIC PESTICIDES WITH OXYGEN HETERO-ATOM(S) ON	0	0	0	0	0	0	0
2932996560	AROMATIC PESTICIDES WITH OXY HETERO-ATOM(S) NESOI			0	0	0		
2932997000	OTHER AROM HETERO ETC EXCL PROD IN U.S. NT 3 SEC 6	567,000	2,057,488	2,601,453	5,330,995	4,218,824	9,478,555	36,230,129
2933193500	AROMATIC OR MOD AROM DRUGS CONT AN UNFUSED PYR ETC			266,464	374,935	78,360	436,688	396,071
2933292000	AROMATIC OR MODIFIED AROMATIC DRUGS CONTAINING AN		40,000	14,998	6,863	54,173	180,450	105,600
2933294500	DRUGS (EXCLUDING AROMATIC OR MODIFIED AROMATIC) CO	46,600	326,730	3,526	51,700	205,367	340,547	26,700
2933330000	ALFENTANIL, AMILERIDINE, BEZITRAMIDE(INN), ETC.					37,520		
2933394100	DRUGS CONTAINING AN UNFUSED PYRIDINE RING (WHETHER	297,631	301,457	190,299	412,051	572,977	210,020	299,740
2933402000	5-CHLORO-7-IODO-8-QUINOLINOL (ODOCHLORHYDROXYQUIN	1,811,795	1,181,829					
2933402600	OTHER DRUGS CONTAINING A QUINOLINE OR ISOQUINOLINE	3,450	12,708					
2933410000	LEVORPHANOL (INN) AND ITS SALTS			0	12,650			
2933490800	4,7-DICHLOROQUINOLINE			511,851	670,225	208,136	0	79,500
2933492000	ODOCHLORHYDROXYQUIN; DECOQUINATE ETC					19,800		
2933492600	DRUGS CONT A QUINOLINE OR ISOQUINOLINE ETC, NESOI			1,037,412	564,186	1,803,337	1,274,631	1,947,496
2933550000	LOPRAZOLAM (INN), MECLOQUALONE (INN), ETC & SALTS						0	0
2933592100	ANTIHISTAMINES, INCLUDING ANTINAUSEANTS							11,250
2933593600	OTHER AROMATIC OR MODIFIED AROMATIC ANTI-INFECTION	6,840	8,930	10,715	601,629	1,114,960	1,089,386	566,065
2933595300	OTHER AROMATIC OR MODIFIED AROMATIC DRUGS CONTAIN	12,550	19,078	24,452	15,802	0	14,534	9,318
2933595900	OTHER DRUGS (EXCLUDING AROMATIC OR MODIFIED AROMAT	174,460	70,669	57,320	271,378	14,750	190,809	491,220
2933595950	DRUGS CONTAINING A PYRIMIDINE RING (WHETHER OR NOT	0	0					
2933595960	DRUGS CONT A PYRIMIDINE OR PIPERAZINE RING ETC			0	0	0	0	0
2933904600	OTHER ANTI-INFECTION AGENTS		5,750					
2933905300	OTHER CARDIOVASCULAR DRUGS	230,979	331,644					
2933905590	OTHER ANALGESICS, ANTIPIRETTICS AND NON-HORMONAL AN	448,115	231,766					
2933906500	ANTICONSULSANTS, HYPNOTICS & SEDATIVES W/HETEROCYC	1,400,885	1,369,144					
2933907000	OTHER DRUGS PRIMARILY AFFECTING THE CENTRAL NERVOU		13,278					
2933910000	ALPRAZOLAM, CAMAZEPAM, CHORDIAZEPOXIDE (INN), ETC.			160,852	75,084	134,166	270,942	392,328
2933994600	ANTI-INFECTION AGENTS, NESOI			0	24,619	93,483	62,220	456,144
2933995300	CARDIOVASCULAR DRUGS, NESOI			416,480	0	23,202	47,600	34,660
2933995500	ANALGESICS, ANTIPIRETTICS AND NON-HORMONAL ETC			0	0	0	0	0
2933995590	ANALGESICS, ANTIPIRETTICS & NON-HORMONAL AGTS NESOI			57,556	8,284	8,100	57,558	101,315
2933996100	ANTIDEPRESSANTS, TRANQUILIZERS ETC, NESOI			4,250	141,581	52,275	160,336	0
2933996500	ANTICONSULSANTS, HYPNOTICS AND SEDATIVES			1,706,232	1,144,500	83,000	2,139,469	2,360,180
2933997000	DRUGS PRIM AFFECT THE CENT NERV SYSTEM, NESOI			107,910	41,836	21,544	12,200	0
2934302700	DRUGS W/ A PHENO RING SYS (W/T HYDRO), NESOI			2,233	0	0	6,800	0
2934903000	OTHER HETEROCYCLIC COMPOUNDS USED AS DRUGS	5,409,446	410,435					
2934910000	AMINOREX, BROTILOZOLAM, CLOTIAZEPAM (INN) ETC.			228,196	268,979	129,550	190,552	555,493
2934993000	HETEROCYC CMDPS. USED AS DRUGS, NESOI			305,093	453,695	1,018,921	3,691,367	2,641,599
2937100000	PITUITARY (ANTERIOR) OR SIMILAR HORMONES	196,645	106,300					
2937110000	SOMATOTROPIN, ITS DERIVS & STRUCT ANALOGUES			50,750	70,000	587,235	3,171,700	1,213,350
2937190000	POLYPEPTIDE, PROTEIN & GLYCOPROTEIN HORMONES,NESOI			154,710	945,605	218,841	123,375	192,018
2937230000	ESTROGENS AND PROGESTINS			0	0	0	0	0
2937231010	ESTROGENS OF ANIMAL OR VEGETABLE ORIGIN			41,279	282,404	501,923	327,631	479,646
2937231050	PROGESTINS OF ANIMAL OR VEGETABLE ORIGIN, NESOI			45,299	95,840	71,093	5,736	43,102
2937235010	ESTROGENS NOT DERIV FROM ANIMAL OR VEGETABLE MATER			120,316	280,835	45,800	45,500	63,575
2937235020	PROGESTERONE NOT DERIV FR ANIMAL OR VEGETBLE MATER			1,164,678	604,221	524,364	1,126,660	1,061,260
2937235050	PROGESTINS NOT OF ANIMAL OR VGTABLE ORIGIN, NESOI			227,623	273,528	228,382	226,153	201,620
2937399000	CATECHOLAMINE HORMONES, DERIVS & ANALOGUES NESOI			0	77,796	219,256	495,917	647,755
2937409000	HORMONE AMINO-ACID DERIVATIVES, NESOI			109,730	116,128	356,497	846,701	4,335,707
2937500000	PROSTAGLANDINS, THROMBOXANES & LEUKOTRIENES			0	5,000	5,270		
2937900000	HORMONES, PROSTAGLANDINS, ETC NESOI			8,214,681	9,527,759	5,192,654	4,713,499	5,891,376
2937920000	ESTROGENS AND PROGESTINS							
2937921010	ESTROGENS OF ANIMAL OR VEGETABLE ORIGIN	4,435	74,115					
2937921050	OTHER PROGESTINS OF ANIMAL OR VEGETABLE ORIGIN	42,640	82,150					
2937925010	ESTROGENS NOT DERIVED FROM ANIMAL OR VEGETABLE MAT	12,285						
2937925020	PROGESTERONE NOT DERIVED FROM ANIMAL OR VEGETABLE	563,824	826,993					
2937925050	OTHER PROGESTINS NOT DERIVED FROM ANIMAL OR VEGETA	51,274	228,182					
2937999550	OTHER HORMONES AND THEIR DERIVATIVES, OTHER STEROI	4,148,226	6,018,550					
2940002000	D-ARABINOSE	14,076	5,854	3,485	0	36,518	243,800	17,325
2940006000	OTHER SUGARS, NESOI EXCL D-ARABINOSE	2,954,684	2,732,437	2,946,433	4,635,544	7,848,501	14,038,100	15,037,061
3002100030	HUMAN IMMUNE BLOOD SERA							
3002100040	FETAL BOVINE SERUM (FBS)	0	0					
3002100060	OTHER BLOOD FRACTIONS NOT ELSEWHERE SPECIFIED OR I	0	0					
3002100090	OTHER BLOOD FRACTIONS NOT ELSEWHERE SPECIFIED OR I	1,298,855	1,806,450					
3002100130	HUMAN IMMUNE BLOOD SERA			25,200	9,796	0	0	0

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3002100140	FETAL BOVINE SERUM (FBS)			0	0	0	0	0
3002100190	BLOOD FRACTIONS NESOI			1,904,672	3,603,898	8,310,529	12,761,088	17,241,284
3002200000	VACCINES FOR HUMAN MEDICINE	0	0	0	0	0	0	0
3002300000	VACCINES FOR VETERINARY MEDICINE	7,852	8,000	9,659	26,127	0	0	0
3002900500	OTHER TOXINS, CULTURES OF MICRO-ORGANISMS (EXCLUDING ANTIALLERGENIC PREPARATIONS, NESOI)	296,145	720,789					
30029005120	HUMAN BLOOD;ANIMAL BLOOD PREPARED FOR THERAP,NESOI			201,993	464,730	290,643	241,379	247,617
3004909090	MEDICAMENTS NOT ELSEWHERE SPECIFIED OR INCLUDED	264,073	691,460					
3004909190	MEDICAMENTS IN MEAS DOSES FOR RETAIL SALE, NESOI			2,751,155	2,329,295	1,889,899	2,183,052	1,647,568
3818000000	CHEMICAL ELEMENTS DOPED FOR USE IN ELECTRONICS, IN	0	0	0	0	0	0	0
3818000010	GALLIUM ARSENIDE WAFERS, DOPED	226,180	53,530	1,138,949	23,464,071	19,699,388	14,034,043	20,032,223
3818000090	OTHER CHEMICAL ELEMENTS DOPED FOR USE IN ELECTRONICS	10,444,420	5,484,211	3,665,508	12,299,665	12,011,277	14,854,731	19,556,367
8401100000	NUCLEAR REACTORS			0	0	0	0	92,495
8401200000	ISOTOPIC SEPARATION MACHINERY AND APPARATUS AND PARTS THEREOF	0	0	0	0	0	0	0
8401300000	FUEL ELEMENTS (CARTRIDGES), NON-IRRADIATED FOR NUCLEAR REACTORS	0	9,216	0	0	19,043	3,000	3,400
8401400000	PARTS OF NUCLEAR REACTORS	0	0	0	18,500	0	0	0
8411114010	TURBOJET AIRCRAFT TURBINES (ENGINES) FOR USE IN CIVIL AIRCRAFT	0	0	0	0	0	0	0
8411114050	TURBOJET AIRCRAFT TURBINES EXCEPT CIVIL, THRUST LEAST 25 KN	0	0	0	0	0	0	0
8411124000	TURBOJET AIRCRAFT ENGINES, THRUST EXCEEDING 25 KN	0	0	0	5,227,484	12,400,000	0	1,775,000
8411124010	TURBOJET AIRCRAFT ENGINES, THRUST NOT EXCEEDING 25 KN	0	0	0	0	0	0	0
8411214010	TURBOPROPPELLER AIRCRAFT ENGINES, POWER NOT OVER 1100 KW	247,500	0	0	0	0	76,650	0
8411224000	TURBOPROPPELLER AIRCRAFT ENGINES, POWER EXCEEDING 1100 KW			0	0	0	0	0
8411224010	TURBOPROPPELLER AIRCRAFT ENGINES, POWER EXCEEDING 1100 KW			0	0	0	0	0
8411814000	GAS TURBINE AIRCRAFT ENGINES, NESOI, POWER NOT EXCEEDING 5000 KW	0	0	0	0	0	750,000	0
8411814010	GAS TURBINE AIRCRAFT ENGINES, NESOI, POWER EXCEEDING 5000 KW	0	0	0	0	0	0	0
8411824010	GAS TURBINE AIRCRAFT ENGINES, NESOI, POWER EXCEEDING 5000 KW	0	0	0	0	0	0	0
8411824050	AIRCRAFT TURBINES (ENGINES), EXCEPT FOR USE IN CIVIL AIRCRAFT	0	0	0	0	0	0	0
8411917010	PARTS OF TURBOJET AND TURBOPROPPELLER AIRCRAFT ENGINES	0	0	0	0	0	0	0
8411917050	PARTS OF TURBOJET AND TURBOPROPPELLER AIRCRAFT ENGINES	0	0	0	0	0	0	0
8411919080	PARTS, NESOI, OF TURBOJET OR TURBOPROPPELLER AIRCRAFT ENGINES	26,136,831	25,414,570	24,805,157	27,590,522	52,721,761	68,893,841	97,170,317
8411997010	PARTS OF GAS TURBINE AIRCRAFT ENGINES FOR USE IN CIVIL AIRCRAFT	0	0	0	0	0	0	0
8411997050	PARTS OF GAS TURBINE AIRCRAFT ENGINES, OTHER THAN FOR USE IN CIVIL AIRCRAFT	0	0	0	0	0	0	0
8411999090	PARTS, NESOI, OF AIRCRAFT GAS TURBINES, EXCEPT TURBOJET	3,219,054	3,174,644	3,586,293	4,133,294	6,384,189	7,911,907	8,841,330
8424893000	SPRAYING APPLIANCES FOR ETCHING, STRIPPING OR CLEANING	0	804,970	0	102,140	8,000	5,692	43,719
8424895000	SPRAYING APPLIANCES DEVELOPING SEMICONDUCTOR WAFERS	0	0	0	0	0	335,435	461,276
8427108060	AUTOMATED GUIDED VEHICLES (AGV) FITTED WITH LIFTING DEVICES	0	0	0	0	0	2,813	0
8428900010	INDUSTRIAL ROBOTS FOR LIFTING, HANDLING, LOADING OR UNLOADING	172,458	64,594	168,458	0	10,000	720,354	335,060
8428900015	INDUSTRIAL ROBOTS FOR LIFTING, HANDLING, LOADING OR UNLOADING	0	0	0	0	0	0	0
8456100000	MACHINE TOOLS FOR WORKING ANY MATERIAL BY REMOVAL OF MATERIAL	0	0	0	0	0	0	0
8456101010	MACHINE TOOLS FOR WORKING METAL, BY LASER OR OTHER OPTICAL BEAM	0	40,299	0	133,100	0	23,000	619,873
8456101020	MACHINE TOOLS FOR WORKING METAL, BY LASER OR OTHER OPTICAL BEAM	0	0	0	0	55,550	71,827	0
8456106000	MACHINE TOOLS USED IN SEMICONDUCTOR WAFER PRODUCTIONS	28,500	0	19,000	0	40,240	81,939	246,704
8456108000	MACHINE TOOLS OPERATED BY LASER PROCESSES, NESOI	0	0	0	0	0	0	468,683
8456200000	MACHINE TOOLS FOR WORKING ANY MATERIAL BY REMOVAL OF MATERIAL	0	0	0	0	0	0	0
8456201050	MACHINE TOOLS FOR WORKING METAL, BY ULTRASONIC PROCESSES	2,880	10,810	0	0	15,023	0	0
8456205000	MACHINE TOOLS, EXCEPT MTL, FOR ULTRASONIC PROCESSES	0	0	38,250	0	0	0	67,208
8456300000	ELECTRO-DISCHARGE MACHINE TOOLS FOR REMOVING MATERIAL	0	0	0	0	0	0	0
8456301020	MACHINE TOOLS FOR REMOVING MATERIAL, BY ELECTRO-DISCHARGE	5,011,900	108,055	900,160	241,423	810,564	140,600	1,779,626
8456301050	MACHINE TOOLS FOR REMOVING MATERIAL, BY ELECTRO-DISCHARGE	2,515,468	4,639,061	541,293	719,918	4,793,307	12,176,248	9,607,858
8456301070	MACHINE TOOLS FOR REMOVING MATERIAL, BY ELECTRO-DISCHARGE	0	0	208,846	0	263,234	42,170	252,928
8456305000	MACHINE TOOLS FOR WORKING MATERIAL OTHER THAN METAL	2,200	0	21,555	35,642	72,932	125,463	26,977
8456910000	DRY ETCHING (INCLUDING PLASMA) MACHINES DESIGNED TO ETCH	0	0	0	0	0	586,942	1,728,292
8456991000	FOCUSED ION BEAM MILLING MACHINES TO PRODUCE OR REPRODUCE	0	0	0	0	0	0	206,000
8456993005	MACHINE TOOLS FOR WORKING METAL, OF A KIND USED FOR MILLING	0	0	0	0	0	0	0
8456993040	MACHINE TOOLS FOR WORKING METAL, BY ELECTRON BEAM	0	0	0	0	2,962	0	62,755
8456993060	MACHINE TOOLS FOR WORKING METAL, OF A KIND USED FOR MILLING	0	0	0	0	12,750	0	0
8456993080	MACHINE TOOLS FOR WORKING METAL, BY ELECTRON BEAM	66,500	0	34,600	7,800	0	46,630	1,088,656
8456995000	MACHINE TOOLS FOR WORKING ANY MATERIAL OTHER THAN METAL	0	0	0	0	0	0	0
8456997000	MACHINE TOOLS FOR STRIPPING/CLEANING SEMICONDUCTOR WAFERS	0	0	0	16,000	102,500	891,100	302,520
8456999000	MACHINE TOOLS FOR WORKING METAL, BY ELECTRO-CHEMICAL, IONIC-BEAM, PLASMA, NESOI	2,800	6,002	4,438	3,019	79,132	86,126	393,909
8457100015	MACHINE CENTERS, AUTO TOOL CHNG, VERT-SPIN, Y-AXIS NOT OVER 660MM	142,461	187,903	0	133,750	458,410	314,687	1,578,739
8457100025	MACHINE CENTERS, AUTO TOOL CHNG, VERT-SPIN, Y-AXIS OVER 660MM	0	37,884	123,727	0	0	57,131	289,747
8457100035	MACHINE CENTERS, AUTO TOOL CHNG, EXCEPT VERTICAL	0	0	0	0	0	0	0
8457100036	HORIZONTAL MACHING CENTERS WITH ATC	0	0	0	0	0	0	0
8457100039	MACHING CENTERS, AUTO TOOL CHNG, NESOI	0	0	0	0	0	0	0
8457100060	HORIZONTAL SPINDAL MACHINES (68MM-1016MM)	0	0	165,870	0	0	0	0
8457100065	HORIZONTAL SPINDAL MACHINES GT 1016 MM	0	0	0	0	0	0	1,959,660
8457100070	MACHING CENTERS, AUTO TOOL CHNG, NESOI	0	0	0	0	88,902	89,502	0
8457200010	UNIT CONSTRUCTION MACHINES (SINGLE STATION), N/C	0	0	0	0	0	0	0
8457300010	MULTISTATION TRANSFER MACHINES, N/C	0	0	0	0	0	0	35,000
8458110010	HORIZONTAL LATHES, MULTIPLE SPINDLE, METAL REMOVING	13,904	0	0	0	0	0	10,000
8458110030	HORIZONTAL LATHES, EXCEPT MULTIPLE SPINDLE, METAL REMOVING	40,486	29,500	149,150	185,500	415,842	329,880	2,381,275
8458110050	HORIZONTAL LATHES, EXCEPT MULTIPLE SPINDLE, METAL REMOVING	0	0	0	0	146,552	984,005	6,022,914
8458110090	HORIZONTAL LATHES, EXCEPT MULTIPLE SPINDLE, METAL REMOVING	133,717	44,665	0	21,400	45,320	73,084	175,705
8458911060	VERTICAL TURRET LATHES, METAL REMOVING, NUMERICALLY CONTROLLED	113,075	0	0	0	0	166,134	0
8458911080	VERTICAL TURRET LATHES, METAL REMOVING, NUMERICALLY CONTROLLED	0	0	0	0	0	0	0
8458915050	LATHES FOR REMOVING METAL, N/C, EXCEPT MULTIPLE SPINDLE, NESOI	0	0	0	0	0	0	0
8458915070	LATHES FOR REMOVING METAL, N/C, EXCEPT MULTIPLE SPINDLE, NESOI	0	34,863	0	0	0	0	0
8459100000	WAY-TYPE UNIT HEAD MACHINES	0	0	0	0	0	94,534	92,257
8459210080	DRILLING MACHINES, METAL, N/C, NEW	7,500	172,291	66,000	0	0	94,320	548,813
8459310010	BORING MACHINES, HORIZONTAL SPINDLE, TYPICAL, METAL REMOVING, N/C, NEW	0	0	0	0	0	0	0
8459310040	BORING MACHINES, HORIZONTAL SPINDLE, EXCEPT TYPICAL, METAL REMOVING, N/C, NEW	0	0	0	0	0	0	798,490
8459310070	BORING MACHINES, EXCEPT HORIZONTAL SPINDLE, METAL REMOVING, N/C, NEW, NESOI	0	0	0	0	34,560	111,673	62,366
8459400040	BORING MACHINES, VERTICAL, METAL REMOVING, N/C, OVER \$3025, NEW	0	0	0	0	0	35,700	0
8459400070	BORING MACHINES, EXCEPT VERTICAL, METAL REMOVING, N/C, OVER \$3025, NEW	0	0	0	0	0	0	0
8459510080	MILLING MACHINES, KNEE TYPE, METAL REMOVING, N/C, NEW	92,435	13,126	0	0	0	0	5,885
8459610080	MILLING MACHINES, EXCEPT KNEE TYPE, METAL REMOVING, N/C, NEW	176,796	157,145	84,474	168,063	170,025	193,087	549,409
8459700020	THREADING OR TAPPING MACHINES, METAL REMOVING, N/C	0	0	0	0	0	0	0
8460110080	FLAT SURFACE GRINDING MACHINES, METAL REMOVING, AC	10,393	0	0	0	273,983	0	98,725
8460210080	GRINDING MACHINES EXCEPT FLAT SURFACE, METAL REMOVING	0	0	0	0	101,822	168,105	0
8460310080	SHARPENING (TOOL OR CUTTER GRINDING) MACHINES, METAL REMOVING	3,300	104,379	39,750	39,750	0	87,290	40,128
8460400060	HONING OR LAPPING MACHINES, METAL REMOVING, NUMERICALLY CONTROLLED	0	0	0	0	0	0	0
8460400060	HONING OR LAPPING MACHINES, METAL REMOVING, NUMERICALLY CONTROLLED	4,172	3,000	0	2,890	0	91,729	66,000
8460900060	MACHINE TOOLS USING ABRASIVES, NESOI, N/C, OVER \$3025, NEW	0	0	0	0	0	0	0
8460904060	MACHINE TOOLS USING ABRASIVES, NESOI, N/C, OVER \$3025, NEW	0	4,989	0	18,960	445,460	155,800	233,693

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8461200010	SHAPING OR SLOTTING MACHINES, METAL REMOVING, N/C			0	0	0	0	0
8461204000	SHAPING OR SLOTTING MACHINES, METAL REMOVING, N/C					12,097		
8461300060	BROACHING MACH, METAL REMOV, N/C, OVER \$3025, NEW			0	0	0	0	0
8461304060	BROACHING MACH, METAL REMOV, N/C, NEW							3,100
8461500050	SAWING OR CUTTING-OFF MACHINES, METAL REMOVING, NU			0	0	0	0	0
8461504050	SAWING OR CUTTING-OFF MACHINES, METAL REMOVING, NU	68,014	63,732	47,281	0	21,337	46,810	723,672
8461900040	MACHINE TOOLS WORKING BY REMOVING METAL, NESOI, NU							
8461903040	PLANING MAC,METAL REMOV,NUM CTRL,OVR \$3025,NEW			0	0	0	0	0
8461903080	MAC TOOLS, MTL REMOV,NUM CTRL,OV\$3025,NEW,NESOI			0	0	0	39,000	0
8462210080	BENDING, FOLDING, STRAIGHTENING OR FLATTENING MACH	0	0	0	0	0	0	0
8462214085	NUMERIC CONTROL MACH FR BEND SEMICONDC LEAD,NESOI							47,745
8462218085	BENDING, FOLDING, OR FLATTENING MACHINES (INCLUDIN	368,473	235,040	415,751	557,165	489,185	772,653	621,993
8462310080	SHEARING MACHINES (INC PRESSES), OTHER THAN COMBIN		55,749	14,760	69,521	268,192	24,150	3,973,218
8462410080	PUNCHING OR NOTCHING MACHINES (INC PRESSES), INCLU	0	0	0	311,620	34,500	88,197	695,220
8462910060	HYDRAULIC PRESSES, METAL FORMING, NUMERICALLY CONT					0	0	0
8462914060	HYDRAULIC PRESSES, METAL FORMING, NUMERICALLY CONT	346,401	158,169	56,661	249,193	0	15,750	416,843
8462990030	MACHINE TOOLS (INCLUDING PRESSES) WORKING BY FORMI	0	0	0	0	0	0	0
8464100040	SAW MACH DESIGND TO SAW BLANK SEMICONDUCTOR WAFERS		20,000	0	0	29,100	219,913	420,965
8464201000	GRIND/POLISH MACH FR PROCESSING SEMICONDUCTOR WAFER						89,465	678,686
8464901040	MACH TOOLS FR SCRIBING/SCORING SEMICONDUCTOR WAFER			0	0	4,800	0	0
8464901060	MACH TLS FR SCRIBING/SCORING SEMICONDUCTOR WAFERS	0	0	0	0	0	548,000	50,000
8464906000	MACHINE TOOLS FOR WET DEVELOPING OR STRIPPING			0	0	0	8,369	559,386
8465100025	WOODWORKING TENONERS,NUMERICALLY CONTROLLED,NEW						375,166	93,520
8465920055	ROUTERS, NEW, NUMERICALLY, WOODWORKING MACHINES						1,460,839	1,869,631
8465950020	BORING MACHINES, N/C, WOODWORKING, NEW						0	80,210
8470500020	POINT-OF-SALE TERMINAL TYPE CASH REGISTERS	71,857,896	109,737,423	144,000,000	138,000,000	74,437,829	75,463,531	191,808,845
8471100000	ANALOG OR HYBRID AUTOMATIC DATA PROCESSING MACHINE	792,537	370,599	31,123	750,203	10,389,641	4,551,735	7,244,793
8471300000	PORTABLE DIGITAL ADP MACHINE, WEIGHING NOT MORE TH	11,077,111	22,585,531	632,000,000	4,160,000,000	7,710,000,000	10,678,064,512	12,830,320,230
8471410035	DIGITAL ADP MACH CONTAINING IN SAME HOUSING AT LEA	162,629	8,167	167,589	10,720,743	16,416,501	21,751,008	1,920,051
8471410065	DIGITAL ADP MACH CONTAINING IN SAME HOUSING AT LEA	721,800	0	32,600	930,836	493,831	19,745	2,123
8471410095	DIGITAL ADP MACH CONTAINING IN SAME HOUSING AT LEA	1,016,782	2,522,191	53,666,329	231,000,000	348,000,000	201,784,025	375,302,376
8471491035	DIGITAL PROCESSING UNIT WHICH MAY CONTAIN IN SAME	334,697,751	236,995,976	94,653,097	83,229,376	68,298,512	316,852,530	33,022,818
8471491065	DIGITAL PROCESSING UNIT WHICH MAY CONTAIN IN SAME	6,008	8,008	8,741	8,386	100,106	11,397	13,966
8471491095	DIGITAL PROCESSING UNIT WHICH MAY CONTAIN IN SAME	20,588,471	5,949,718	53,210,134	136,000,000	483,000,000	1,258,366,537	1,717,850,739
8471491500	COMBINATION INPUT/OUTPUT UNITS WITHOUT A CRT,WHETH	7,428	52,762	307,267	190,505	1,081,081	216,387	1,401,497
8471492400	DISPLAY UNITS, NOT INCORPORATING A CRT, HAVING A V	132,617	59,306	129,417	2,091,273	232,000,000	394,833,501	517,879,327
8471492600	COLOR CATHODE-RAY TUBE (CRT) MONITORS, ENTERED WIT	0	0	0	0	0	5,267,676	1,507,127
8471492900	DISPLAY UNITS, NESOI, NOT INCORPORATING A CRT, ENT	716,305	787,639	925,786	1,706,162	12,601,108	24,130,912	55,896,607
8471494200	OPTICAL SCANNERS AND MAGNETIC INK RECOGNITION DEVI	4,987,191	9,357,530	3,685,041	4,706,900	8,382,472	11,730,175	19,021,387
8471494850	CARD KEY AND MAGNETIC MEDIA ENTRY DEVICES, ENTERED	91,940	165,420	504,972	530,898	1,236,455	640,654	211,232
8471494875	ADP OUTPUT DEVICES, NESOI, ENTERED IN THE FOR OF S	60,808	54,132	121,513	22,928	507,016	14,071,587	60,881,654
8471494895	ADP INPUT UNITS, NESOI, ENTERED IN THE FORM OF SYS	534,031	1,425,475	2,542,587	9,400,326	10,457,759	12,916,647	15,460,697
8471495010	MAGNETIC DISK DRIVE UNITS WITH A DISK DIAMETER GT=	10,346	5,600	6,853	4,431	128,000	13,840	0
8471495020	FLEXIBLE (FLOPPY) MAGNETIC DISK DRIVE UNITS, NESOI	227,865	1,888,236	1,447,750	581,047	475,565	423,151	84,015
8471495040	HARD MAGNETIC DISK DRIVE UNITS, NESOI, ENTERED WIT	1,342,752	363,664	1,393,435	256,311	2,297,075	31,709,774	2,527,843
8471495060	DISK DRIVE UNITS, NESOI, ENTERED WITH THE REST OF	207,496	353,083	181,366	710,020	3,475,876	13,246,302	6,070,288
8471495080	OTHER STORAGE UNITS, NESOI, ENTERED WITH THE REST	414,174	124,380	139,429	232,252	913,770	266,156	954,500
8471496000	CONTROL OR ADAPTER UNITS FOR AUTOMATIC DATA PROCES	1,074,340	791,924	2,458,628	2,943,503	10,213,388	34,457,051	26,768,781
8471498500	UNITS, NESOI, SUITABLE FOR PHYSICAL INCORPORATION	1,430,171	1,757,007	685,187	515,170	500,410	272,336	2,660,034
8471499000	AUTOMATIC DATA PROCESSING UNITS,NESOI, ENTERED WIT	0	0	0	0	0	0	0
8471499500	UNITS, NESOI, FOR AUTOMATIC DATA PROCESSING MACHIN	1,260,729	59,225	549,216	283,860	3,626,503	1,469,510	1,366,748
8471500035	DIGITAL PROCESSING UNIT WHICH MAY CONTAIN IN SAME	39,079	37,482	50,078	1,033,783	261,398	64,694	55,950
8471500065	DIGITAL PROCESSING UNIT WHICH MAY CONTAIN IN SAME	12,093	0	0	0	30,300	8,950	14,211
8471500085	DIGITAL PROCESSING UNITS EXCLUDE SUBHEADING 8471.4	765,980,055	245,314,979	440,000,000	936,000,000	1,060,000,000	1,576,858,243	1,965,635,851
8471601035	COMBINATION INPUT/OUTPUT UNITS WITH COLOR CATHODE	1,659,110	811,655	1,011,657	235,840	0	73,210	98,550
8471601065	COMBINATION INPUT/OUTPUT UNITS WITH A MONOCHROME C	3,274,489	292,584	0	3,655	19,624	134,511	59,436
8471601095	COMBINATION INPUT/OUTPUT UNITS WITHOUT A CRT,WHETH	25,721,794	17,431,722	30,284,333	50,999,866	19,955,281	34,360,034	40,965,835
8471603000	DISPLAY UNITS, NOT INCORPORATING A CRT, HAVING A V	13,001,910	18,440,173	47,933,729	174,000,000	144,000,000	47,306,155	34,489,157
8471604580	DISPLAY UNITS, NESOI, NOT INCORPORATING A CRT	96,342,517	223,716,078	1,320,000,000	2,870,000,000	4,870,000,000	5,278,156,699	5,232,383,747
8471605100	LASER PRINTER UNITS INCORPORATING AT LEAST THE MED	152,317,295	353,785,648	437,000,000	132,000,000	276,000,000	571,639,406	866,994,623
8471605200	LASER PRINTER UNITS INCORPORATING AT LEAST THE MED	198,961,951	163,329,064	188,000,000	99,114,042	110,000,000	156,604,297	121,267,297
8471607040	OUTPUT DEVICES, NESOI, SUITABLE FOR INCORPORATION	186,042	177,519	148,187	1,610,374	7,680,603	1,565,395	274,923
8471607080	INPUT UNITS, NESOI, SUITABLE FOR PHYSICAL INCORPOR	2,137,841	6,112,271	8,884,430	9,606,280	8,292,052	10,713,843	8,631,820
8471608000	OPTICAL SCANNERS AND MAGNETIC INK RECOGNITION DEVI	359,257,255	289,156,150	297,000,000	150,000,000	156,000,000	144,885,012	160,584,508
8471609030	CARD KEY AND MAGNETIC MEDIA ENTRY DEVICES	987,006	4,982,850	2,508,955	2,725,586	2,616,050	2,268,388	4,664,304
8471609070	ADP OUTPUT DEVICES, NESOI	1,009,872	2,454,652	2,592,990	399,477	640,648	101,196	1,412,222
8471609090	ADP INPUT UNITS, NESOI	285,091,534	253,439,509	279,000,000	304,000,000	307,000,000	346,080,548	389,651,063
8471701000	MAGNETIC DISK DRIVE UNITS WITH A DISK DIAMETER GT=	877,400	804,907	21,198	3,302,632	2,019,154	1,128,619	17,048,711
8471702000	MAGNETIC DISK DRIVE UNITS FOR AUTOMATIC DATA PROCE	828,434	1,033,579	2,191,004	4,264,748	484,817	4,263,544	4,231,022
8471703000	MAGNETIC DISK DRIVE UNITS, NESOI, WITH A DISK DIAM	123,792	31,306	823,264	3,426,508	1,166,514	1,224,117	1,333,854
8471704035	FLEXIBLE (FLOPPY) MAGNETIC DISK DRIVE UNITS, NESOI	105,844,773	85,178,406	109,000,000	81,931,758	68,926,557	45,720,033	37,829,438
8471704065	HARD MAGNETIC DISK DRIVE UNITS, NESOI, NOT ASSEMBL	297,222,671	321,540,522	314,000,000	425,000,000	612,000,000	1,018,524,777	1,233,361,851
8471704095	DISK DRIVE UNITS, NESOI, NOT ASSEMBLED IN CABINETS	1,551,774	7,846,252	16,480,713	27,770,061	12,117,255	11,151,416	1,422,091
8471705035	FLEXIBLE (FLOPPY) MAGNETIC DISK DRIVE UNITS, NESOI	3,844,440	7,049,460	16,059,696	21,523,459	34,440,526	29,675,030	14,961,903
8471705065	HARD MAGNETIC DISK DRIVE UNITS, NESOI	1,493,558	1,265,238	1,979,231	21,138,677	52,700,894	60,931,357	102,033,253
8471705095	DISK DRIVE UNITS, NESOI	14,887,719	4,457,678	2,241,612	5,755,045	9,202,013	889,931	5,192,249
8471706000	OTHER STORAGE UNITS, NESOI, NOT ASSEMBLED IN CABIN	769,886,086	835,960,509	1,160,000,000	1,060,000,000	1,230,000,000	1,072,371,133	1,372,972,846
8471709000	OTHER STORAGE UNITS, NESOI	11,610,484	59,090,795	90,126,833	69,215,953	102,000,000	162,049,984	159,936,611
8471801000	CONTROL OR ADAPTER UNITS FOR AUTOMATIC DATA PROCES	228,601,874	286,624,337	409,000,000	583,000,000	1,180,000,000	1,521,930,616	1,568,466,243
8471804000	UNITS, NESOI, SUITABLE FOR PHYSICAL INCORPORATION	8,609,598	8,310,488	19,457,522	12,663,015	12,981,265	55,527,840	45,231,607
8471809000	OTHER UNITS FOR AUTOMATIC DATA PROCESSING MACHINES	10,610,880	5,513,264	24,470,645	31,035,614	53,425,971	105,871,989	251,075,106
8471900000	MACHINES AND UNITS THEREOF FOR PROCESSING DATA, NE	13,926,848	20,541,800	21,338,834	31,361,574	47,195,404	183,159,148	159,665,560
8473300000	PARTS AND ACCESSORIES FOR AUTOMATIC DATA PROCESSIN	0	0	0	0	0	0	0
8473301000	PARTS AND ACCESSORIES OF AUTOMATIC DATA PROCESSING	1,727,113,524	0	0	0	0	0	0
8473301040	PARTS AND ACCESSORIES OF AUTOMATIC DATA PROCESSING	0	245,646,418	278,000,000	508,000,000	787,000,000	969,536,628	1,775,693,889
8473301080	PARTS AND ACCESSORIES OF AUTOMATIC DATA PROCESSING	0	1,529,492,315	2,140,000,000	2,370,000,000	2,960,000,000	3,034,010,636	3,729,743,524
8473302000	PARTS AND ACCESSORIES, INCLUDING FACE PLATES AND L	11,193,480	77,202,172	55,339,984	72,313,710	51,307,494	40,343,663	40,343,663
8473303000	PARTS AND ACCESSORIES OF AUTOMATIC DATA PROCESSING	212,331,480	286,110,983	355,000,000	414,000,000	625,000,000	686,494,706	689,269,376
8473305000	PARTS AND ACCESSORIES OF THE MACHINES OF HEADING 8	1,609,572,272	1,704,632,176	2,180,000,000	2,700,000,000	4,200,000,000	4,560,886,603	4,876,655,753
8473306000	OTHER PARTS AND ACCESSORIES OF PRINTERS FOR AUTOMA	3,377,369	17,074,142	32,365,765	5,371,636	4,203,170	5,989,308	3,931,706
8473309000	OTHER PARTS AND ACCESSORIES OF AUTOMATIC DATA PROC	38,956,381	26,306,571	28,663,069	31,375,969	57,524,094		

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HS Code	Commodity Description	2000	2001	2002	2003	2004	2005	2006
8479500000	INDUSTRIAL ROBOTS, NESOI	0	24,000	35,373	0	14,565	156,035	236,176
8479898472	APPARATUS FOR GROWING SEMICONDUCTOR CRYSTALS			0	0	0	0	0
8479898474	MACHINE TO COAT SEMICONDUCTOR WAFERS WITH EMULSION			0	0	0	0	0
8479898476	CHEMICAL VAPOR DEPOSITION APPARATUS			0	0	0	0	0
8479898490	MACH NESOI FOR PROD & ASSEMBLY OF SEMICONDUCTORS			2,914,881	913,202	276,966	1,772,500	3,500,000
8479898572	APPARATUS DESIGNED TO GROW MONOCRYSTAL SEMICONDUCTO						1,075,522	3,118,314
8479898574	MACHINES (SPINNERS) DESIGNED TO COAT PHOTOGRAPHIC	0	0					
8479898576	CHEMICAL VAPOR DEPOSITION (CVD) APPARATUS INCLUDIN	0	0					
8479898578	PHYSICAL DEPOSITION APPARATUS INCLUDING SPUTTERING	0	0					
8479898590	MACHINES FOR PRODUCTION & ASSEMBY OF DIODES, TRANS	0	309,290					
8479909440	PARTS OF INDUSTRIAL ROBOTS, NESOI			144,032	100,979	178,112	1,227,434	586,764
8479909540	PARTS OF INDUSTRIAL ROBOTS	5,125	65,502					
8504902000	PARTS OF POWER SUPPLIES FOR AUTOMATIC DATA PROCESS	3,544,751	1,627,089	2,546,518	2,485,340	1,684,032	5,352,298	7,691,017
8504904000	OTHER PARTS AND ACCESSORIES OF POWER SUPPLIES FOR	8,623,244	10,840,027	14,509,454	18,841,161	29,357,457	29,391,359	29,974,871
8514302000	FURNACES AND OVENS FOR DIFFUSION, OXIDATION OR ANN	0	10,000	49,124	122,950	52,210	104,600	10,848
8515210000	MACHINES AND APPARATUS FOR RESISTANCE WELDING OF M	0	124,165	60,082	166,936	872,765	476,240	327,896
8515310000	MACHINES AND APPARATUS FOR ARC (INCLUDING PLASMA A	464,512	43,591	65,384	239,997	492,808	1,122,826	1,028,416
8517190000	VIDEOPHONES	0	0	0	0	0	0	0
8517194000	VIDEOPHONES	36,545		3,963,026	807,837	3,352,841	4,232,690	3,019,840
8517210000	FACSIMILE MACHINES	74,079,955	122,868,869	154,000,000	161,000,000	174,000,000	143,638,491	140,597,494
8517301500	CENTRAL OFFICE SWITCHING APPARATUS	8,737	256,039	845,785	678,276	540,085	66,482	3,313,697
8517302000	PRIVATE BRANCH EXCHANGE SWITCHING APPARATUS	44,155	387,344	53,022	286,438	639,555	929,559	1,055,037
8517302500	ELECTRONIC KEY TELEPHONE SYSTEMS	249,657	2,532,938	4,087,165	2,849,494	5,029,504	2,469,096	2,629,594
8517303000	TELEPHONIC SWITCHING APPARATUS,NESOI	1,879,612	242,946	2,461,766	5,789,446	4,156,683	4,444,941	2,515,868
8517305000	TELEGRAPHIC SWITCHING APPARATUS	1,160,911	1,294,932	7,375,771	35,034,956	58,159,799	215,213,766	140,656,977
8517501000	MODEMS (MODULATOR-DEMODULATOR APPARATUS) OF A KIND	168,357,157	187,413,889	224,000,000	187,000,000	377,000,000	424,001,063	469,644,321
8517505000	CARRIER-CURRENT LINE SYSTEM APPARATUS, TELEPHONIC	18,163,790	17,494,764	31,723,632	25,921,807	66,529,775	330,130,862	311,773,825
8517506000	OTHER APPARATUS, TELEGRAPHIC, FOR CARRIER-CURRENT	1,801,460	1,699,862	8,476,836	19,458,586	4,222,553	9,890,303	62,831,745
8517509000	OTHER APPARATUS, TELEGRAPHIC, FOR DIGITAL LINE SYS	30,540,387	3,882,196	75,644,418	213,000,000	471,000,000	828,594,907	1,487,605,041
8517900400	PARTS OF FACSIMILE MACHINES SPECIFIED IN ADDITIONA	26,975,661	24,322,674	30,990,189	32,390,752	33,914,072	24,215,268	21,544,302
8517900800	PARTS OF FACSIMILE MACHINES, NESOI	14,557,803	14,016,752	12,090,758	9,315,921	20,545,925	38,649,193	36,935,316
8517902000	PARTS FOR TELEPHONIC SWITCHING APPARATUS			0	0	0	0	0
8517902400	PARTS FOR TELEPHONIC SWITCHING OR TERMINAL APPARAT	10,062,590	17,077,333	5,957,867	7,440,906	7,282,753	15,394,289	19,667,205
8517902600	PARTS OF TELEGRAPHIC SWITCHING APPARATUS INCORPORA	317,283	86,136	194,150	301,066	523,701	501,624	748,066
8517903200	PARTS OF ARTICLES OF SUBHEADING 8517.20, 8517.30,	2,387,591	3,395,456	3,121,513	2,271,811	3,364,043	5,075,090	5,594,086
8517903400	PARTS OF TELEPHONIC AND TELEGRAPHIC SWITCHING APP	11,937,208	1,539,879	6,634,979	9,508,537	6,240,753	5,279,334	12,833,897
8517903600	PRINTED CIRCUIT ASSEMBLIES FOR TELEPHONIC SWITCHIN	88,772,586	75,532,931	63,793,242	37,849,676	60,288,980	90,956,195	110,747,584
8517903800	PRINTED CIRCUIT ASSEMBLIES FOR TELEPHONIC APPARATU	102,495,746	62,120,304	40,825,887	27,725,824	35,324,835	60,851,062	42,186,882
8517904400	PRINTED CIRCUIT ASSEMBLIES FOR TELEGRAPHIC APPARAT	5,488,953	6,291,465	11,723,993	131,000,000	341,000,000	316,953,489	320,534,187
8517905000	PARTS,NESOI,FOR TELEPHONIC APPARATUS	0	0	0	0	0	0	0
8517905200	PARTS, INCLUDING FACE PLATES AND LOCK LATCHES, FOR	2,493,918	918,554	2,109,024	4,306,769	3,072,826	3,270,747	4,556,899
8517905800	PARTS FOR TELEPHONIC APPARATUS FOR SWITCHING OR TE	2,363,114	1,449,602	3,235,106	2,968,146	3,753,447	2,602,659	6,492,110
8517906400	PARTS OF TELEPHONIC APPARATUS, NESOI	40,567,646	41,007,430	34,414,150	37,326,739	42,314,534	44,328,746	75,536,005
8517909000	PARTS FOR TELEGRAPHIC APPARATUS	0	0	0	0	0	0	0
8519990045	OPTICAL DISC (INCLUDING COMPACT DISC) PLAYERS	657,676,103	697,224,898	847,000,000	701,000,000	634,000,000	532,423,107	355,984,277
8521100000	VIDEO RECORDING OR REPRODUCING APPARATUS, WHETHER	0	0	0	0	0	0	0
8521106000	VIDEO CASSETTE OR CARTRIDGE RECORDING AND REPRODUC	466,652,987	392,077,753	340,000,000	197,000,000	116,000,000	330,130,862	311,773,825
8521109000	VIDEO RECORDING OR REPRODUCING APPARATUS, MAGNETIC	2,016,737	1,109,502	177,335	4,368,380	963,126	9,890,303	62,831,745
8521900000	VIDEO RECORDING OR REPRODUCING APPARATUS EXCEPT MA	609,892,848	1,263,515,900	2,170,000,000	2,470,000,000	3,030,000,000	2,882,044,808	3,402,295,464
8524310000	DISCS FOR LASER READING SYSTEMS, FOR REPRODUCING P	0	0	0	0	0	0	0
8524310030	DISCS FOR LASER READING SYSTEMS FOR REPRODUCING PH	1,183,740	5,971,095	2,494,311	2,038,570	625,798	5,056,268	5,897,610
8524310070	LASER DISCS,NOT FOR REPRODUCING SOUND/IMAGE, NESOI	0	0	2,290,161	5,012,683	5,788,795	3,838,479	5,620,810
8524390000	DISCS FOR LASER READING SYSTEMS, NESOI	0	0	0	0	0	0	0
8524394000	DISCS FOR REPRODUCING REPRESENTATIONS OF INSTRUCTI	19,459,335	24,567,826	13,479,436	41,086,171	58,067,111	79,809,881	60,626,324
8524398000	DISCS FOR LASER READING SYSTEMS, NESOI	1,182,616	3,856,731	12,749,226	11,429,075	8,125,029	13,162,837	17,651,875
8524400000	MAGNETIC TAPE RECORDINGS FOR REPRODUCING PHENOMENA	31,966	9,773	3,094	63,867	99,869	13,315	71,695
8524910000	OTHER RECORDED MEDIA, NESOI, FOR REPRODUCING PHENO	0	0	0	0	0	0	0
8524910030	PREPACKAGED SOFTWARE FOR ADP MACHINES, OF A KIND S	806,912	444,254	1,094,580	2,490,036	3,267,009	2,991,173	4,546,348
8524910070	OTHER MAGNETIC MEDIA, FOR REPRODUCING PHENOMENA OT	1,086,359	1,065,963	787,151	1,244,843	232,708	180,172	306,328
8524990000	RECORDED MEDIA, NESOI	0	0	0	0	0	0	0
8524994000	RECORDED MEDIA FOR SOUND OR OTHER SIMILARLY RECOR	6,672,345	5,416,863	9,805,392	6,548,021	9,423,668	20,009,026	12,825,402
8525106070	RADIO TRANSMITTERS,NESOI, CAPABLE OF TRANSMITTING	0	0	0	0	0	0	0
8525106090	RADIO TRANSMITTERS,NESOI, CAPABLE OF TRANSMITTING	0	0	0	0	0	0	0
8525107065	TRANSMITTERS CAPABLE OF TRANSMITTING ON FREQUENCY	216,548	33,397	22,892	10,160	234,464	160,571	410,358
8525107085	TRANSMIT FR FREQUENCY GT 1000 MHZ,RADIOBROADCAST	0	0	68,727	294,946	0	259,443	525,318
8525107090	TRANSMISSION APPARATUS FOR RADIOBROADCASTING, NESO	0	19,409	1,279,297	871,111	422,416	369,228	1,112,702
8525108020	TRANSMISSION APPARATUS,NESOI,FOR CIVIL AIRCRAFT	0	0	0	0	0	0	0
8525108040	TRANSMISSION APPARATUS,NESOI,FOR RADIOTELEPHONY,RAD	0	0	0	0	0	0	0
8525109025	TRANSMITTERS CAPABLE OF TRANSMITTING ON FREQUENCY	1,378,786	439,441	201,983	724,064	481,074	390,464	325,509
8525109065	TRANSMITTERS CAPABLE OF TRANSMITTING ON FREQUENCY	49,882	2,041,041	4,909,093	4,946,738	6,458,282	4,667,439	7,038,711
8525109085	TRANSMITTERS CAPABLE OF TRANSMITTING ON FREQUENCY	1,480,904	3,428,042	1,123,217	428,825	787,900	33,889,170	9,464,152
8525109090	TRANSMISSION APPARATUS FOR RADIOTELEPHONY OR RADIO	577,101	9,809,541	10,390,357	29,942,091	56,388,237	132,056,335	114,929,445
8525203025	RADIO TRANSCEIVERS, HAND-HELD, FOR FREQUENCIES EXC	147,737,524	175,857,655	355,000,000	737,000,000	876,000,000	153,456,058	131,730,014
8525203055	RADIO TRANSCEIVERS, NESOI, FOR FREQUENCIES EXCEEDI	0	0	0	0	0	0	0
8525203080	RADIO TRANSCEIVERS,EXCEPT HANDHELD, FOR FREQUENCY	16,312,057	5,407,611	6,543,552	13,415,865	23,515,215	14,742,564	29,380,030
8525209020	RADIO TELEPHONES DESIGNED FOR INSTALLATION IN MOTO	748,054	122,750	73,929	556,261	318,970	730,855	5,481,851
8525209040	RADIO TELEPHONES DESIGNED FOR THE PUBLIC CELLULAR	0	0	0	0	0	0	0
8525209060	RADIO TELEPHONES DESIGNED FOR THE PUBLIC CELLULAR	52,744	20,940	1,523,260	427,262	828,233	3,602,967	2,579,811
8525209070	RADIO TELEPHONES DESIGNED FOR THE PUBLIC CELLULAR	280,772,544	614,093,134	1,440,000,000	1,970,000,000	4,310,000,000	8,457,345,725	10,899,631,782
8525209080	RADIO AND TELEVISION TRANSMISSION APPARATUS, NESOI	14,879,727	38,725,855	131,000,000	117,000,000	264,000,000	592,087,968	709,127,453
8525300020	TELEVISION CAMERAS, COLOR	0	0	0	0	0	0	0
8525300070	TELEVISION CAMERAS, EXCEPT COLOR	0	0	0	0	0	0	0
8525303000	GYROSTABILIZED TELEVISION CAMERAS					90,931	12,410	248,829
8525306000	STUDIO TV CAMERAS, EXC SHOLDER-CARRIED & PORTABLE			18,523	3,224	5,899	95,213	103,916
8525309005	TELEVISION CAMERAS, NESOI, COLOR	87,983,755	66,293,237	51,319,383	56,434,773	88,013,264	130,090,111	184,098,218
8525309060	TELEVISION CAMERAS, EXCEPT COLOR	12,856,268	10,226,092	6,346,583	15,524,138	12,223,904	13,477,518	18,432,649
8525404000	DIGITAL STILL IMAGE VIDEO CAMERAS	174,505,466	175,709,257	637,000,000	1,300,000,000	2,060,000,000	2,478,670,555	2,759,939,912
8525408020	CAMCORDERS, 8 MM	202,858,924	130,515,357	20,538,480	52,746,847	48,971,383		
8525408050	CAMCORDERS (OTHER THAN 8 MM TYPE), NESOI	170,321	53,342	912,675	14,691,540	48,879,726	41,248,267	231,228,582
8525408085	STILL IMAGE VIDEO CAMERAS AND VIDEO CAMERA RECORDE	25,985,220	18,745,337	9,358,129	21,746,347	15,580,200	47,385,347	76,114,656
8526100020	RADAR DESIGNED FOR BOAT OR SHIP INSTALLATION	2,540,318	2,190,852	1,312,844	1,517,047	1,690,344	2,390,952	3,880,253
8526100040	RADAR APPARATUS, OTHER THAN APPARATUS DESIGNED FOR	1,949,976	2,617,043	4,075,809	130,560	140,284	52,018	379,803
8526100070	RADAR APPARATUS NESOI	0	0	0	0	0	0	0
8526910010	RADIO NAVIGATIONAL AID APPARATUS FOR USE IN CIVIL	0	0	0	0	0	0	0
8526910020	RADIO NAVIGATIONAL AID APPARATUS, RECEPTION ONLY T	137,993	13,092,625	37,				

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8526910030	RADIO NAVIGATIONAL AID APPARATUS, RECEPTION ONLY T	0	0	0	0	0	0	0
8526910040	RADIO NAVIGATIONAL AID APPARATUS, NESOI	119,849	365,245	2,323,571	22,110,514	27,615,491	71,883,128	183,252,883
8526910070	RADIO NAVIGATIONAL AID APPARATUS, NESOI	0	0	0	0	0	0	0
8526920000	RADIO REMOTE CONTROL APPARATUS	21,203,198	18,519,293	20,604,340	29,403,446	32,704,866	31,792,256	37,017,639
8527905000	INFANT NURSERY MONITOR SYSTEMS, PACKAGE CONSISTING	30,645,464	27,834,800	27,448,962	30,976,953	31,407,902	27,125,345	31,908,180
8527908045	RADIO RECEIVERS, NESOI, CAPABLE OF RECEIVING SIGNALS	0	0	0	0	0	0	0
8527908055	RADIO RECEIVERS, NESOI, CAPABLE OF RECEIVING SIGNALS	0	0	0	0	0	0	0
8527908075	RECEPTION APPARATUS FOR RADIOTELEPHONY, RADIOTELEGR	0	0	0	0	0	0	0
8527909550	RADIO RECEIVERS CAPABLE OF RECEIVING SIGNALS ON FR	78,944	756,560	869,628	547,310	886,281	750,931	599,955
8527909560	RADIO RECEIVERS CAPABLE OF RECEIVING SIGNALS ON FR	0	2,184	6,890	0	0	9,583	11,272
8527909590	RECEPTION APPARATUS FOR RADIOBROADCASTING OR RADIO	5,383,267	9,195,446	1,445,932	1,084,596	1,804,300	2,440,790	6,482,416
8527909745	RADIO RECEIVERS (400 - 1000 MHZ)	0	0	0	0	0	0	0
8527909755	RADIO RECEIVERS GT 1000 MHZ	0	0	0	0	0	0	0
8527909775	RECEPTION APPARATUS RADIO COMMUNICATIONS, NESOI	0	0	0	0	0	0	0
8528120400	TV RECEIVERS INCOMPLETE OR UNFINISHED ASSEMB, COLO	8,534	52,828	246,797	188,176	961,083	938,824	698,064
8528121201	TV RECEIVERS, NON-HIGH DEFINITION, COLOR, SINGLE P	36,853,644	10,348,618	1,911,088	20,981,322	29,730,308	26,704,637	42,425,940
8528121601	TV RECEIVERS, NON-HIGH DEFINITION, COLOR, SINGLE P	0	5,365	5,615,328	0	568,552	1,863,885	4,743,391
8528122800	RECEPTION APPAR FOR TV, NON-HI DEF, COLOR, SINGLE PIC	15,549,578	5,563,379	822,976	17,876,778	173,000,000	57,286,328	63,484,958
8528123000	RECEPTION APPARATUS FOR TV, COLOR, INCORPORATING V	0	0	0	0	0	0	0
8528123600	TV RECP, COL, NON-HD, PROJ, CATH-RAY, W/ VIDEO REC/REP	0	0	0	0	20,039	0	1,438,371
8528124000	RECEPTION APPAR FOR TV, COLOR, NON-HIGH DEFINITION,	0	16,597,170	10,715,664	6,911,936	117,055	2,600	2,810,638
8528124400	TV REC, COL, HI-DEF, NON-PROJ, CATH-RAY TUBE W/REC REP	0	0	0	0	0	0	0
8528124800	RECEPTION APPARATUS FOR TV, COLOR, HIGH-DEFINITION	4,000	5,847	6,662	10,477,308	2,528,376	6,838,759	6,577,905
8528125200	TV RECP, COLOR, HD, PROJ, CATH-RAY, W/ VIDEO REC/REP	0	0	0	0	0	76,338	147,600
8528125600	RECEPTION APPARATUS FOR TV, COLOR, HIGH DEFINITION	8,000	15,203	3,534	8,000	658,565	0	37,696
8528126201	RECEPTION APPARATUS FOR TV, CLR, W/ A FLAT PANEL SC	0	113,400	2,813,560	16,018,083	14,506,648	71,374,669	97,545,440
8528126401	RECEPTION APP. FR TV, COLOR, WITH A FLAT PANEL SCR	16,912	563,200	0	36,011	12,275,384	65,600,207	241,126,694
8528126801	RECEPTION APPARATUS FOR TV, COLOR, WITH A FLAT PAN	5,637,875	5,323,464	11,076,256	31,250,027	68,543,667	80,697,572	98,901,630
8528127201	RECEPTION APPARATUS FOR TV, COLOR, WITH A FLAT PAN	325,140	1,788,637	1,480,530	35,637,314	283,000,000	994,591,384	2,230,578,689
8528127601	RECEPNT APPAR FOR TV, COLOR, INCORPORATING VIDEO R	123,840	1,061,500	1,874,344	637,859	1,309,902	2,878,048	2,395,330
8528128001	REC TV, COLOR, VIDEO RECORD OR REPRODUCE, EXC 34.29CM	0	5,204	26,842	0	30,008	94,949	9,163,803
8528128401	RECEPTION APPARATUS FOR TELEVISION, COLOR, WITH A	174,528	0	71,272	0	180,105	94,941	5,972,846
8528129200	RECEPTION APPARATUS FOR TELEVISION, COLOR, WITH A	0	3,987,022	3,558,018	724,436	74,279,611	409,783,025	747,617,573
8528129300	RECEPTION APPARATUS FOR TV, COLOR, WITH A PRINTED	181,972	27,502,537	51,249,379	57,119,753	48,196,971	49,903,151	34,742,575
8528129700	RECEPTION APPARATUS FOR TELEVISION, COLOR, WITH A	172,374	917,242	327,761	3,452,460	5,957,022	9,661,482	45,465,501
8528301000	VIDEO PROJ, CL, FLAT PNL, INCOMPLETE, NOT INCORP A	0	45,500	0	0	66,500	1,155,205	81,539
8528302000	VIDEO PROJECTORS, COLOR, INCOMPLETE, NOT INCORPORA	0	3,175	294,000	887,758	354,381	151,062	174,931
8528303000	VIDEO PROJECTORS, CLR, NON-HI DEF, W/ CRT, W/ REC/REP	0	0	0	0	0	0	130,445
8528304000	VIDEO PROJECTORS, CLR, NON-HD, W/ CRT, NESOI	0	3,352	0	0	5,064	0	143,194
8528306000	VIDEO PROJECTORS, COLOR, HI DEFINITION W/ CRT, NESOI	0	0	0	0	0	0	2,270,012
8528306201	VIDEO PROJ, CLR, FLAT PNL, SCR, W/ REC/REP, LT=34.29 CM	0	0	0	0	267,130	68,000	154,224
8528306401	VIDEO PROJ, CLR, FLAT PNL, SCR, W/ REC/REP, GT 34.29 CM	0	0	0	2,500	2,500	0	8,829
8528306601	RECEPT. APP. FOR TELEVIS. VIDEO PROJ, COLOR, FLAT	255,750	21,116,469	36,318,927	210,000,000	497,000,000	659,322,924	967,816,683
8528306801	RECEPT. APP. FOR TELEVIS. VIDEO PROJECT, COLOR, F	0	258,400	0	266,052	154,747	1,389,973	2,145,369
8528307200	VIDEO PROJECTORS, COLOR, NESOI, INCORPORATING VIDE	4,200	0	2,906	7,416	0	1,389,973	2,145,369
8528307800	VIDEO PROJECTORS, COLOR, NESOI	4,200	4,397	13,334	26,639	342,260	490,238	1,982,159
8529900900	PRINTED CIRCUIT ASSEMBLIES, OTHER THAN TUNERS, PRI	5,371	0	7,822	73,637	3,614,186	2,588,220	131,119
8529901620	PRINT CIR ASSEMBLS, ASSEMBLS & SUBASSEMBLS OR RADAR	0	0	24,244	36,019	11,493	2,557	25,429
8529901640	PRINTED CIRCUIT ASSEMBLIES, ASSEMBLIES, & SUBASSEMBL	64,198	37,260	9,463	40,000	53,320	68,240	37,193
8529901660	PRNTD CIR ASSEMBLS, ASSEMBLS & SUBASSEMBLS CO	533,302	165,680	187,193	178,268	336,426	409,778	649,113
8529901920	PRNTD CIR ASSEMBLS, NOT ASSEM & SUBASSEM OF RADAR	0	0	0	0	5,980	0	12,546
8529901940	PRINTED CIRCUIT ASSEMBLIES, NOT ASSEMBLIES AND SUB	0	4,066	58,201	449,255	79,063	79,720	1,572,631
8529901960	PRINTED CIRCUIT ASSEMBLIES, NOT ASSEMBLIES AND SUB	232,559	285,941	307,165	735,769	570,270	463,136	370,679
8529902600	TRANCEIVER ASSEMBLIES FOR THE APPARATUS OF SUBHEAD	0	6,500	8,673	82,775	19,275	379,000	485,186
8529903000	PARTS OF TELEVISION CAMERAS	0	0	0	0	0	0	0
8529903900	PARTS OF TELEVISION RECEIVERS, EXCEPT TUNERS, SUBAS	4,486,331	1,235,425	575,479	3,122,911	51,769,302	112,106,430	49,936,902
8529904720	PARTS FOR RADAR APPARATUS	0	0	0	0	0	0	0
8529904740	PARTS FOR RADIO NAVIGATIONAL AID APPARATUS (EXCEPT	0	0	0	0	0	0	0
8529904760	PARTS FOR RADIO REMOTE CONTROL APPARATUS	0	0	0	0	0	0	0
8529904900	COMBINATION OF PARTS SPECIFIED IN ADDITIONAL U.S.	245,339	0	739,000	280,224	179,582	426,136	523,094
8529906300	OTHER, PARTS OF PRINTED CIRCUIT ASSEMBLIES, INCLUDI	0	2,700	0	0	0	16,768	37,677
8529907300	OTHER PARTS OF PRINTED CIRCUIT ASSEMBLIES, INCLUDI	282,720	228,887	233,395	354,725	572,850	534,596	385,566
8529907800	MOUNTED LENSES FOR TELEVISION CAMERAS & OTHER PART	0	30,725	75,984	145,649	352,522	935,196	1,626,930
8529908100	OTHER PARTS OF ARTICLES OF HEADINGS 8525 AND 8527,	253,487	669,856	243,067	450,430	535,373	1,761,749	3,937,538
8529909520	ASSEMBLIES & SUBASSEMBLIES, OF RADAR APPARATUS	0	0	0	0	129,597	344,437	57,771
8529909540	ASSEMBLIES AND SUBASSEMBLIES, CONSISTING OF 2 OR MO	58,249	22,698	12,084	68,839	515,541	736,990	209,881
8529909560	ASSEMBLIES AND SUBASSEMBLIES, CONSISTING OF 2 OR MO	435,367	155,527	285,341	457,225	485,233	155,992	409,754
8529909720	OTHER PARTS OF RADAR APPARATUS, EXCEPT ASSEMBLIES	0	3,084	2,267	0	2,500	6,926	900,692
8529909740	OTHER PARTS OF RADIO NAVIGATIONAL AID APPARATUS (E	63,730	360,552	786,414	1,419,411	542,880	1,668,041	5,289,430
8529909760	OTHER PARTS OF RADIO REMOTE CONTROL APPARATUS, EXC	465,536	259,849	125,176	236,984	846,237	1,192,115	1,646,049
8534000020	PRINTED CIRCUITS HAVING A BASE OF PLASTIC IMPREGNA	182,113,984	130,011,985	132,000,000	154,000,000	183,000,000	231,848,682	334,481,928
8537109030	NUMERICAL CONTROLS FOR CONTROLLING MACHINE TOOLS	32,436	48,630	0	6,700	7,083	57,750	1,273,424
8537109050	PANEL BOARDS AND DISTRIBUTION BOARDS, FOR VOLTAGES	9,121,734	7,444,167	5,890,487	5,819,908	18,644,637	20,919,141	22,878,405
8537109060	PROGRAMMABLE CONTROLLERS	49,815,895	43,317,283	48,943,980	42,310,779	59,883,612	93,785,621	112,348,597
8540790000	MICROWAVE TUBES, NESOI	0	0	0	0	0	0	492,000
8540890060	LIGHT-SENSING TUBES	64,404	69,455	1,344,061	4,148,912	5,927,730	6,584,456	7,748,036
8541100040	UNMOUNTED CHIPS, DICE, WAFERS FOR DIODES OTHER THA	732,862	850,292	1,355,741	2,762,210	1,632,952	2,225,853	2,947,241
8541100050	ZENER DIODES	4,564,117	6,655,954	15,836,575	9,843,661	13,821,916	14,542,998	21,548,344
8541100060	MICROWAVE DIODES	334,300	28,778	198,428	143,359	842,923	2,027,945	458,312
8541100070	DIODES, OTHER THAN PHOTSENSITIVE OR LED, WITH A MA	2,619,134	3,538,910	5,649,982	6,117,948	7,957,242	7,732,621	11,773,994
8541100080	SEMICONDUCTOR DIODES NOT PHOTSENSITIVE OR LED, WITH	62,701,507	42,060,273	56,036,869	66,322,874	89,075,479	97,927,595	112,760,669
8541210040	UNMOUNTED CHIPS, DICE, WAFERS FOR TRANSISTORS OTHE	3,241,123	1,576,023	6,063,142	2,621,852	579,546	1,303,755	4,228,317
8541210075	TRANSISTORS OTHER THAN PHOTSENSITIVE, WITH A DISS	3,390,661	929,963	1,384,928	2,817,495	6,655,071	8,997,711	10,305,661
8541210080	TRANSISTORS, OTHER THAN PHOTSENSITIVE, WITH A DISS	0	0	0	0	0	0	0
8541210095	TRANSISTORS OTHER THAN PHOTSENSITIVE, WITH A DISS	21,807,333	24,489,216	41,248,722	33,470,499	43,936,413	46,669,237	54,399,359
8541290040	UNMOUNTED CHIPS, DICE AND WAFERS FOR TRANSISTORS O	3,051,333	3,205,740	2,952,245	2,700,939	3,442,866	3,228,430	2,356,536
8541290075	TRANSISTORS OTHER THAN PHOTSENSITIVE, DISSIPATION	54,050	1,142,913	964,123	1,695,354	3,317,240	2,542,773	1,989,759
8541290080	TRANSISTORS, OTHER THAN PHOTSENSITIVE, WITH A DISSI	0	0	0	0	0	0	0
8541290095	TRANSISTORS OTHER THAN PHOTSENSITIVE, DISSIPATION	50,757,169	29,279,252	26,874,499	27,364,113	34,263,133	42,188,092	64,957,148
8541300040	UNMOUNTED CHIPS, DICE & WAFERS FOR THYRISTORS, DIA	2,700	0	25,471	33,062	69,627	108,644	181,726
8541300080	THYRISTORS, DIACS & TRIACS, OTHER THAN PHOTSENSIT	704,078	874,495	2,639,307	2,879,456	2,690,502	23,611,453	27,922,862
8541406010	UNMOUNTED CHIPS, DICE OR WAFERS FOR PHOTSENSITIVE	211,363	127,321	152,145	62,746	90,576	133,519	113,266
8541406020	SOLAR CELLS ASSEMBLED INTO MODULES OR PANELS	13,310,343	19,023,699	7,442,222	13,168,778	11,267,735	21,329,410	68,245,920
8541406030	SOLAR CELLS, NOT ASSEMBLED INTO MODULES OR MADE UP	121,318	191,803	85,967	119,157	423,218	856,137	2,162,525
8541406050	PHOTSENSITIVE DIODES, NESOI	6,363,338	6,244,566	9,886,660	5,035,850	5,719,238	8,848,228	8,976,2

## US Imports of Advanced Technology Products From China

HS Code	Commodity Description	2000	2001	2002	2003	2004	2005	2006
8541407040	UNMOUNTED CHIPS, DICE AND WAFERS FOR PHOTSENSITIV	79,406	68,629	144,860	170,382	159,652	431,920	175,288
8541407080	PHOTOSENSITIVE TRANSISTERS	634,550	376,081	580,299	999,590	533,147	900,111	889,468
8541408000	OPTICAL COUPLED ISOLATORS	10,227,839	6,211,867	2,362,708	2,879,771	6,966,625	9,622,035	18,831,693
8541409500	PHOTOSENSITIVE SEMICONDUCTOR DEVICES, NESOI	4,226,580	7,619,391	5,370,885	5,102,195	8,584,003	6,477,132	10,375,457
8541500040	UNMOUNTED CHIPS, DICE, WAFERS FOR SEMICONDUCTOR DE	102,058	308,662	1,619,347	2,217,672	8,488,454	1,723,072	656,988
8541500080	SEMICONDUCTOR DEVICES, NESOI	6,253,795	3,383,603	4,864,048	5,180,391	3,817,074	4,504,650	5,483,081
8541900000	PARTS FOR DIODES, TRANSISTORS & SIMILAR SEMICONDUCT	1,619,794	2,995,016	3,328,165	4,753,688	7,281,013	12,833,645	17,203,373
8542100000	CARDS INCORP. ELEC. INTEGRATED CRCT (SMART CARDS)			6,457,779	15,451,801	18,473,062	36,010,887	53,520,452
8542120000	MONOLITHIC DIGITAL INTEGRATED CIRCUITS; CARDS INCO	4,366,468	12,474,845					
8542134000	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, MOS TECHN	126,372	2,878					
8542138005	UNMOUNTED CHIPS, DICE WAFERS OF SILICON FOR DIGITA	10,643,465	50,553,133					
8542138010	UNMOUNTED CHIPS, DICE, & WAFERS OTHER THAN SILICON	1,609,498	707,530					
8542138012	MONOLITHIC IC'S, DIGITAL, SILICON, (MOS), VOLATIL	0	415,312					
8542138021	MONOLITHIC INTEGRATED CIRCUITS OF SILICON, DIGITAL	74,880						
8542138022	MONOLITHIC INTEGRATED CIRCUITS OF SILICON, DIGITAL	287,327						
8542138023	MONOLITHIC INTEGRATED CIRCUITS OF SILICON, DIGITAL	278,106						
8542138024	MONOLITHIC INTEGRATED CIRCUITS OF SILICON, DIGITAL	135,933						
8542138025	MONOLITHIC IC'S, DIGITAL, SILICON, (MOS), VOLATIL							
8542138026	MONOLITHIC INTEGRATED CIRCUITS OF SILICON, DIGITAL	1,883,114	402,802					
8542138027	MONOLITHIC IC'S, DIGITAL, SILICON, (MOS), VOLATIL							
8542138028	MONOLITHIC IC'S, DIGITAL, SILICON, (MOS), VOLATIL							
8542138029	MONOLITHIC INTEGRATED CIRCUITS OF SILICON, DIGITAL		184,957					
8542138030	MONOLITHIC INTEGRATED CIRCUITS OF SILICON, DIGITAL		8,113,805					
8542138031	MONOLITHIC INTEGRATED CIRCUITS OF SILICON, DIGITAL		4,061,092					
8542138032	MONOLITHIC INTEGRATED CIRCUITS OF SILICON, DIGITAL		6,135,161					
8542138034	MONOLITHIC INTEGRATED CIRCUITS OF SILICON, DIGITAL	44,792,573						
8542138037	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	88,050						
8542138038	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	111,227						
8542138039	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,M	97,428						
8542138041	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL,SILICON, M	1,424,795						
8542138043	MONOLITHIC IC'S, DIGITAL, SILICON, (MOS), VOLATIL	0	2,354,344					
8542138044	MONOLITHIC IC'S, DIGITAL, SILICON, (MOS), VOLATIL	0	0					
8542138045	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL,SILICON, M		5,516					
8542138049	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	620,633	289,918					
8542138051	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	59,896,007	42,603,887					
8542138052	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	6,799,814	4,409,486					
8542138056	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	0	0					
8542138057	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	70,079,120	42,520,187					
8542138058	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL,SILICON, M	598,378	351,845					
8542138059	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	3,044,237	2,650,630					
8542138060	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	12,999,372	6,444,559					
8542138061	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	0	0					
8542138065	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	2,510,076	6,182,996					
8542138066	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	52,529,571	49,733,654					
8542138067	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	256,866	149,630					
8542138068	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	5,974,188	1,950,754					
8542138072	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	77,043,188	69,844,079					
8542138092	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, OTHER THA	666,839	228,611					
8542138096	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, OTHER THA	2,131,308	697,406					
8542144000	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, BIPOLAR T	22,742	0					
8542148001	UNMOUNTED CHIPS, DICE, & WAFERS OF SILICON FOR DIG	116,888	22,978					
8542148002	UNMOUNTED CHIPS, DICE, & WAFERS OTHER THAN SILICON	196,674	10,018					
8542148004	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	49,272	9,085					
8542148007	MONOLITHIC INTEGRATED CIRCUITS OF SILICON, DIGITAL	11,420	1,357,360					
8542148011	MONOLITHIC INTEGRATED CIRCUITS OF SILICON, DIGITAL	497,212	103,965					
8542148012	MONOLITHIC INTEGRATED CIRCUITS OF SILICON, DIGITAL	51,861	16,457					
8542148017	MONOLITHIC INTEGRATED CIRCUITS OF SILICON, DIGITAL	2,832,384	8,465,907					
8542148092	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, OTHER THA	2,380	5,100					
8542148096	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, OTHER THA	37,870	64,849					
8542194000	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, OBTAINED	8,098	11,928					
8542198001	UNMOUNTED CHIPS, DICE, & WAFERS OF SILICON FOR DIG	240,994	372,931					
8542198002	UNMOUNTED CHIPS, DICE, & WAFERS OTHER THAN SILICON	47,021	526,897					
8542198073	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	0	123,123					
8542198078	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	4,771,253	3,876,829					
8542198079	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	649,974	360,547					
8542198092	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, OTHER THA	201,890	12,197					
8542198096	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, OTHER THA	420,762	651,936					
8542214000	MNLTHC IC DGTL, FOR HIGH DEF TV GT 100000 GTS			18,628	148,055	645,888	436,613	884,883
8542218005	CHIPS & WAFERS OF SILICON DGTL MNLTHC IC			21,839,575	29,205,674	35,995,196	21,931,954	35,023,224
8542218010	UNMTD CHP, DICE & WAFR FOR DGTL MNLTHC IC, EX SLCN			3,021,851	2,470,276	3,971,226	2,774,348	3,754,754
8542218020	MONO INTGR CRCT SLCN DGTL VOLT MEM DRAM LT-16 MB					0	1,650,070	15,505,807
8542218021	MONO IC,DIG,DRAM,NOT OVER 1,000,000 BITS			639,665	148,855	5,697	0	0
8542218022	MNLTHC IC,SLCN,DGTL,VOLTL MEMORY,DRAM, 1-8 MEGABITS			593,419	566,266	1,203,585		
8542218023	MNLTHC IC,SLCN,DGTL,VOLTL MEMORY,DRAM, 8-16 MEGABIT			88,065	257,693	154,719		
8542218024	MNLTHC IC,SLCN,DGTL,VOLTL MEMORY,DRAM,16-64 MEGABIT			1,498,481	971,571	3,032,765	5,863,416	3,337,714
8542218025	MNLTHC IC,SLCN,DGTL,VOLTL MEMORY,DRAM, 64-128 MEGBT			9,205,148	640,055	43,742,386	48,753,408	24,573,405
8542218026	MONO INT CRC SLCN DGT VLT MEM DRAM GT 128 LT-256MB					0	61,296,485	39,628,161
8542218027	MONO INT CRC SLCN DGT VLT MEM DRAM GT 256 LT-512MB					0	76,650,498	219,599,303
8542218028	MONO INT CRC SLCN DGT VLT MEM DRAM GT 512MB LT-1GB				0	0	3,334,509	3,051,890
8542218029	MNLTHC IC,DGTL,SI,VOLTILE MEM,DRAM, GT 128 MEGABIT			11,777,035	6,637,948	47,828,289		
8542218030	MONO INTEGR CIRCT SLCN DGTL VOLT MEM DRAM GT 1 GB					0	5,542,967	2,781,222
8542218031	MONO IC,DGTL,SILCON,VOLATIL,(SRAM)LT 256 KBITS			308,370	614,204	926,369	1,576,620	1,111,518
8542218032	MNLTHC IC,SLCN,DGTL,VOLTL MEMORY,SRAM,256KLB-2MEGB			16,508	1,163,602	1,245,582	1,441,574	1,352,489
8542218038	MONOLITHIC INTEGRATED CRCT SRAM GT 256 KILOBITS				0	0	0	0
8542218039	MNLTHC IC,SLCN,DGTL,VOLTL MEMORY,SRAM, OVR 2MEGABIT			1,232,439	4,500,950	3,749,081	2,478,015	3,191,982
8542218041	MNLTHC IC,SLCN,DGTL,EX VOLTL,EEPROM, NT OVR 64 KLB			17,546,382	11,506,462	10,245,493	10,814,730	10,437,074
8542218042	MNLTHC IC,SLCN,DGTL,EX VOLTL,EEPROM,64-512 KILOBIT			4,789,582	4,319,299	4,940,533	3,725,546	3,480,217
8542218048	MONOLITHIC INTEG CIRCUIT, DIGITL,(EEPROM),ELEC ERAS			0	0	0	0	0
8542218049	MNLTHC IC,SLCN,DGTL,EX VOLTL,EEPROM,OVER 512KILBT			51,437,655	96,032,735	149,000,000	238,352,817	174,276,658
8542218051	MNLTHC IC,SLCN,DGTL,EX VOLTL,EPROM, NT OVR 64KLB			242,130	91,657	281,220	223,198	700,935
8542218052	MNLTHC IC,SLCN,DGTL,EX VOLTL,EPROM,64-512 KILOBITS			1,163,732	1,147,016	474,883	325,270	253,935
8542218058	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, (EPROM)			0	0	0	0	0
8542218059	MNLTHC IC,SLCN,DGTL,EX VOLTL,EPROM,OVR 512KILOBITS			2,902,466	5,025,458	1,040,447	354,646	1,283,197
8542218060	MONOLITHIC IC, DIGITAL, SILICON, NESOI			2,982,593	1,206,169	2,907,828	9,449,992	12,104,357
8542218071	MONO IC,DIG,SIL,(ASIC)&(PLA)MICROPROC LT 8 BITS			34,535,811	37,440,953	33,727,301	32,838,649	36,746,300

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HS Code	Commodity Description	2000	2001	2002	2003	2004	2005	2006
8542218072	MONO IC,DIG,SIL,(ASIC)&(PLA)MICROPROCES 16 BITS			487,673	610,709	1,345,314	3,502,352	17,930,302
8542218079	MONO IC,DIG,SIL, (ASIC)&(PLA) MCRPROC GT 32BTS			5,805,286	83,241,106	204,000,000	253,022,631	221,969,246
8542218081	MNLTHC IC,SLCN,DIGITAL,EX MICROPROCR,TTL			263,664	1,136,613	702,238	658,480	2,452,478
8542218082	MNLTHC IC,SLCN,DIGTL,EX MICROPROCR,ECL			95,714	5,103	59,504	85,534	239,752
8542218088	MONOLITHIC INTEGRAT CIRCUITS DIGITL, NT MEM,NESOI			0	0	0	0	0
8542218089	MNLTHC IC, SLCN, DIGTL, EX MICROPROCR, NESOI			138,000,000	91,202,037	125,000,000	116,053,639	176,617,819
8542218091	MONOLITHIC IC,DIGITAL, MEMRY, (EXCPT SILCON, NESOI			1,626,010	61,083	633,346	80,335	762,024
8542218099	MONOLITHIC IC,DIGITAL, EXCPT SILCN OR DIGTL, NESOI			3,201,244	431,977	1,537,009	3,837,560	5,706,158
8542290010	CHPS,DCE,WFRS MONOLITHIC INTEGRAT CIRCUIT,EXEP DIGL			12,191,476	12,810,177	30,383,536	36,737,642	40,953,674
8542290020	MONOLITHIC IC'S,EXE DIGL,OPRAT FREQ GE 100MHZ,NESO			751,977	3,319,567	4,304,909	6,372,542	27,852,856
8542290030	MONOLITHIC IC, FREQUENCY LT 100 MHZ, LOGIC, NESOI			8,329,940	9,117,300	8,771,401	9,699,993	18,100,136
8542290040	MONOLITHIC IC,FREQ,LT100MHZG, OTHR THN LGC, NESOI			20,486,602	15,024,450	18,292,012	26,055,114	38,866,977
8542290050	MONOLITHIC IC,OPERATING FROQUENCY LT 100 MHZ, NESOI			35,949,025	60,344,169	85,040,422	130,426,549	199,685,141
8542300040	UNMOUNTED CHIPS, DICE, WAFERS FOR MONOLITHIC INTEG	3,216,595	8,712,985					
8542300060	MONOLITHIC INTEGRATED CIRCUITS, WITH AN OPERATING	1,154,261	66,619					
8542300065	MONOLITHIC INTEGRATED CIRCUITS, WITH AN OPERATING	27,331,443	28,307,593					
8542300080	MONOLITHIC INTEGRATED CIRCUITS, WITH AN OPERATING	8,235,547	5,426,410					
8542300090	MONOLITHIC INTEGRATED CIRCUITS, WITH AN OPERATING	13,496,635	10,545,149					
8542400075	HYBRID INTEGRATED CIRCUITS, WITH AN OPERATING FREQ	5,321,430	2,689,736					
8542400095	HYBRID INTEGRATED CIRCUITS, NESOI	22,762,175	20,073,264					
8542500000	ELECTRONIC INTEGRATED CIRCUITS ,NESOI, AND MICROAS	2,040,833	1,240,714					
8542600075	HYBRID INTEGRATED CIRCUITS,WITH FREQUENCY GE 30MHZ			2,008,571	4,574,496	9,338,845	33,739,508	10,828,336
8542600095	HYBRID INTEGRATED CIRCUITS, NESOI			16,079,861	9,020,519	16,859,369	23,153,214	24,194,806
8542700000	ELECTRONIC MICROASSEMBLES			2,510,546	5,499,853	9,953,031	12,306,990	25,004,159
8542900000	PARTS FOR ELECTRONIC INTEGRATED CIRCUITS AND MICRO	32,206,553	9,958,390	29,209,757	24,297,299	41,027,742	57,653,508	42,342,926
8543110000	ION IMPLANTERS DESIGNED FOR DOPING SEMICONDUCTOR W	0	0	5,688	2,707	156,326	0	12,138
8543190000	PARTICLE ACCELERATORS, NESOI	3,064,908	234,975	11,673	9,450	8,281	38,152	150,306
8543200000	SIGNAL GENERATORS	3,026,015	1,041,543	1,441,544	2,014,605	2,880,689	2,505,526	3,177,326
8543891000	PVD APPARATUS FOR PROCESS OF SEMICONDUCTOR MATS			0	153,392	13,159	1,402,501	53,822
8543892000	PHYSICAL VAPOR DEPOSITION (PVD) APPARATUS, NESOI			0	0	0	0	65,701
8544700000	INSULATED OPTICAL FIBER CABLES WITH INDIVIDUALLY S	10,041,993	11,794,733	10,732,428	12,126,812	27,871,979	44,289,659	70,949,933
8802110030	NEW HELICOPTERS, NON-MILITARY, OF AN UNLADEN WEIGH			0	0	0	0	0
8802110045	NEW HELICOPTERS, NON-MILITARY, UNLNDN WT 998-2000KG			0	0	0	0	0
8802120040	NEW HELICOPTERS, NON-MILITARY, OF AN UNLADEN WEIGH			0	0	0	0	0
8802300030	NEW MULTIPLE ENGINE AIRPLANES, NON-MILITARY, OF AN			0	0	0	0	0
8802300040	NEW TURBOFAN POWERED AIRPLANES, NON-MILITARY, OF A	0	0	0	0	0	0	0
8802300050	NEW MULTI ENG PLANES,NOT TURBOFAN,(4536-15000 KG)			0	0	0	0	0
8802400040	NEW AIRCRAFT PASSENGER TRANSPORTS, NON-MILITARY, O	0	0	0	0	0	0	0
8802400060	NEW AIRCRAFT CARGO TRANSPORTS, NON-MILITARY, OF AN	0	0	0	0	0	0	0
8802603000	COMMUNICATIONS SATELLITES			0	0	0	0	0
8803100010	PROPELLERS AND ROTORS AND PARTS THEREOF FOR USE IN	0	0	0	0	0	0	0
8803100015	PROPS & RTRS & PARTS FOR CVL ARCT, FOR DOD OR USCG			0	0	0	0	0
8803100030	PROPELLERS AND ROTORS AND PARTS THEREOF FOR USE IN	5,000		7,800	4,716	9,116	0	34,300
8803100050	PROPELLERS AND ROTORS AND PARTS THEREOF FOR USE IN	0	0	0	0	0	0	0
8803100060	PROPELLERS & ROTORS & PARTS THEREOF FOR MILITARY AIR			0	0	0	40,000	0
8803200010	UNDERCARRIAGES AND PARTS THEREOF FOR USE IN CIVIL	0	0	0	0	0	0	0
8803200030	UNDERCARRIAGES AND PARTS THEREOF FOR USE IN CIVIL	557,266	1,353,995	149,929	20,983	23,495	282,862	341,871
8803200050	UNDERCARRIAGES AND PARTS THEREOF FOR USE IN MILITA	0	0	0	0	0	0	0
8803200060	UNDERCARRIAGES & PARTS THEREOF FOR MILITARY AIR	0	0	0	67,200	0	55,652	124,552
8803300010	OTHER PARTS OF AIRPLANES OR HELICOPTERS FOR USE IN	0	0	0	0	0	0	0
8803300015	OTHER PARTS OF AIRPLANES OR HELICOPTERS, NESOI, FO	84,382		164,743	11,500	0	18,715	3,765
8803300030	OTHER PARTS OF AIRPLANES OR HELICOPTERS, NESOI, FO	31,582,443	55,862,988	50,581,021	51,860,283	67,615,910	70,546,148	114,507,201
8803300050	OTHER PARTS OF AIRPLANES OR HELICOPTERS FOR USE IN	0	0	0	0	0	0	0
8803300060	OTHER PARTS OF AIRPLANES OR HELICOPTERS FOR USE IN	792,026	1,235,828	2,183,094	8,939,280	10,601,781	12,415,543	14,220,324
8803903000	PARTS OF COMMUNICATIONS SATELLITES	12,950	0	0	0	0	122,900	3,960
8805200000	GROUND FLYING TRAINERS AND PARTS THEROF	50,295	39,168					
8805210000	AIR COMBAT SIMULATORS AND PARTS THEREOF			11,334	0	0	0	0
8805290000	GROUND FLYING TRAINERS AND PARTS THEREOF, NESOI			2,453	23,392	13,522	13,858	110,587
9001100000	OPTICAL FIBERS, OPTICAL FIBER BUNDLES AND CABLES E	0	0	0	0	0	0	0
9001100030	OPTICAL FIBERS FOR TRANSMISSION OF VOICE, DATA OR	30,740,411	25,134,835	4,792,605	2,369,200	3,352,319	3,386,642	2,645,329
9001100070	OPTICAL FIBERS EXCEPT OF PLASTIC, NESOI	653,570	2,139,682	1,473,791	472,971	494,613	77,461	257,642
9001100085	OPTICAL FIBERS BUNDLES AND CABLE OTHER THAN THOSE	284,502	1,178,995	628,453	670,386	696,159	1,211,888	849,459
9001901000	LENSES, PRISMS, AND MIRRORS, UNMOUNTED, NESOI	0	0	0	0	0	0	0
9001904000	LENSES, UNMOUNTED, NESOI	8,746,720	15,814,527	13,741,121	15,785,384	16,727,008		
9001905000	PRISMS, UNMOUNTED, NESOI	1,100,146	1,424,767	848,574	1,308,683	1,437,191		
9001906000	MIRRORS, UNMOUNTED, NESOI	316,861	1,104,093	1,218,068	1,154,188	2,078,602		
9001909000	OPTICAL ELEMENTS, UNMOUNTED, NESOI	9,251,750	10,747,573	3,349,737	6,514,510	15,221,436		
9002902000	PRISMS MOUNTED, NESOI	170,878	265,945	256,286	681,675	1,693,790		
9002904000	MIRRORS MOUNTED, NESOI	884,301	633,245	740,941	1,552,354	1,336,164		
9002909500	OPTICAL ELEMENTS, NESOI	5,090,535	2,750,585	2,905,552	2,262,844	2,916,148	3,254,434	5,692,602
9005100020	PRISM BINOCULARS FOR USE WITH INFRARED LIGHT	789,546	87,214	241,625	1,486,766	83,309	1,615,191	6,364,307
9005804020	OPTICAL TELESCOPES FOR USE WITH INFRARED LIGHT	18,438	18,614	157,445	37,036	11,000	51,570	66,574
9005804040	OPTICAL TELESCOPES EXCEPT FOR USE WITH INFRARED LI	44,622,900	26,896,147	27,090,723	40,723,307	41,923,583	40,094,031	47,400,552
9006610040	DISCHARGE LAMP AND FLASHLIGHT APPARATUS CAPABLE OF	990,036	425,494	137,903	413,375	1,356,136	454,168	2,208,694
9007914000	PARTS FOR CAMERAS	121,153	93,651	159,062	355,848	524,040	3,595,884	3,493,410
9010410000	DIRECT WRITE-ON-WAFER APPARATUS			0	0	0	0	0
9010410040	E-BEAM DIRECT WRITE WAFER, PROJTN OF CIRCUIT PATRN			0	0	0	0	6,843
9010410080	DIRECT WRT WAFER APPT, FOR PROJ OF CIRCUIT, NESOI			0	0	0	2,145	0
9010420000	STEP AND REPEAT ALIGNERS			0	0	0	0	0
9010490000	APPARATUS FOR THE PROJECTION OF CIRCUIT PATRNS NES	0	0	70,524	0	0	2,380	0
9011100000	STEREOSCOPIC MICROSCOPES	0	0	0	0	0	0	0
9011104000	STEREOSCOPIC MICROSCOPES WITH MEANS TO PHOTO IMAGE			0	0	0	1,505,211	1,592,944
9011108000	STEREOSCOPIC MICROSCOPES, NESOI			0	0	0	3,366,051	3,647,098
9011200000	MICROSCOPES, FOR MICROPHOTOGRAPHY&CINEMA ETC,NESOI	0	0	0	0	0	0	0
9011204000	MICROSCOPES, WITH MEANS TO PHOTOGRAPH THE IMAGE			0	0	0	1,550,806	1,459,958
9011208000	MICROSCOPES, EXC WITH MEANS TO PHOTOGRAPH IMAGE			0	0	0	1,573,509	1,864,786
9011800000	OTHER COMPOUND OPTICAL MICROSCOPES, NESOI	16,638,581	15,028,922	16,588,970	16,042,513	17,735,462	19,502,300	18,214,949
9011900000	PARTS AND ACCESSORIES FOR COMPOUND OPTICAL MICROSC	6,094,173	4,031,264	4,442,438	5,155,068	7,064,904	6,411,781	6,078,340
9012100000	MICROSCOPES OTHER THAN OPTICAL MICROSCOPES; DIFFRA	416,793	304,300	201,025	1,103,797	180,264	1,210,794	775,709
9012900000	PARTS AND ACCESSORIES FOR MICROSCOPES OTHER THAN O	729,211	1,066,588	939,229	1,047,840	1,201,714	878,769	1,507,890
9013103000	TELESCOPIC SIGHTS FOR RIFLE, NESOI	391,398	382,347	194,867	209,361	456,248	682,022	875,803
9013104000	PERISCOPIES, TELESCOPES DESIGNED TO FORM PARTS OF M	522,992	420,141	3,492,866	3,797,883	5,030,248	4,764,092	4,823,308
9013200000	LASERS, OTHER THAN LASER DIODES	0	0	0	0	0	2,059,869	2,884,941
9013800000	OPTICAL DEVICES, APPLIANCES AND INSTRUMENTS, NESOI	0	0	0	0	0	0	0
9014101000	OPTICAL DIRECTION FINDING COMPASSES	73,624	790,018	259,748	438,685	594,327		

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9014106040	GYROSCOPIC COMPASSES, OTHER THAN ELECTRICAL FOR US				0	0	0	
9014106080	GYROSCOPIC COMPASSES, EXC ELEC, EXC CIVIL AIRCRAFT						0	
9014107030	GYROSCOPIC ELECTRICAL DIRECTION FINDING COMPASSES	4,526	22,500	7,200	4,900	12,690	37,224	33,200
9014107040	GYROSCOPIC COMPASSES, ELECTRICAL FOR USE IN CIVIL	0	0	0	0	0	0	0
9014107060	OTHER ELECTRICAL DIRECTION FINDING COMPASSES	640,798	886,012	834,971	1,856,386	403,458	1,079,429	844,383
9014107080	GYROSCOPIC COMPASSES, ELECTRICAL, EXCEPT FOR USE I	0	0	0	0	0	0	0
9014109080	DIRECTION FINDING COMPASSES, EXCEPT FOR USE IN CIV				0	0	0	0
9014202000	OPTICAL INSTRUMENTS AND APPLIANCES FOR AERONAUTICA	0	0	5,899	24,284	50,000	6,530	57,105
9014204000	AUTOMATIC PILOTS FOR AERONAUTICAL OR SPACE NAVIGAT	28,081	0	78,134	0	200,516	191,211	4,997
9014206000	ELECTRICAL INSTRUMENTS AND APPLIANCES FOR AERONAUT	53,326	20,033	11,429	831,360	19,131	105,666	133,656
9014208040	INSTRUMENTS AND APPLIANCES FOR USE IN CIVIL AIRCRA	106,271	198,839	120,086	312,206	288,904	959,206	20,000
9014208080	INSTRUMENTS AND APPLIANCES FOR AERONAUTICAL OR SPA	815,497	921,338	923,952	1,397,687	1,337,144	901,631	1,832,146
9014801000	OTHER OPTICAL INSTRUMENTS FOR NAVIGATION, NESOI	214,381	178,511	214,074	160,875	235,736	253,318	422,321
9014802000	SHIP LOGS AND DEPTH-SOUNDING APPARATUS FOR NAVIGA	260,027	355,313	327,541	1,198,805	534,052	804,755	1,107,835
9014804000	OTHER ELECTRICAL INSTRUMENTS AND APPLIANCES FOR NA	1,833,003	2,914,742	2,935,264	2,825,599	1,585,431	2,416,257	13,038,341
9014805000	OTHER NAVIGATIONAL INSTRUMENTS AND APPLIANCES, NES	48,091	16,404	30,861	29,891	286,847	136,462	336,967
9014900000	PARTS & ACCESSORIES FOR DIRECTION FINDING COMPASSE	0	0	0	0	0	0	0
9014902080	PARTS AND ACCESSORIES FOR NAVIGATIONAL INSTRUMENTS		2,160	15,000	0	0	0	0
9014904000	PARTS AND ACCESSORIES FOR NAVIGATIONAL INSTRUMENTS		3,425	188,887	56,986	266,660		
9014906000	PARTS AND ACCESSORIES FOR NAVIGATIONAL INSTRUMENTS	971,045	588,019	1,986,110	1,348,026	3,460,727		
9015100000	RANGEFINDERS	0	0	0	0	0	0	0
9015104000	ELECTRICAL RANGEFINDERS	5,752,338	10,898,676	17,219,291	7,442,998	15,266,791	27,909,838	50,157,835
9015108000	RANGEFINDERS, EXCEPT ELECTRICAL	6,770,319	3,124,858	517,103	505,135	570,450	1,277,427	579,850
9015204000	ELECTRICAL THEODOLITES AND TACHYMETERS	19,802	12,210	5,250	379,023	1,512,407	2,887,313	5,539,593
9015304000	ELECTRICAL SURVEYING LEVELS	1,665,197	9,096,305	17,101,552	33,513,499	18,931,053	8,428,149	6,944,549
9015400000	PHOTOGRAMMETRICAL SURVEYING INSTRUMENTS & APPLNCS					0	0	0
9015404000	ELECTRICAL PHOTOGRAMMETRICAL SURVEYING INSTRUMENTS	2,857		0	10,000	52,592	529,012	781,605
9015408000	PHOTOGRAMMETRICAL SURVEYING INSTRUMENTS AND APPLIA	165,973	110,599	419,723	354,097	105,463	31,830	517,423
9015802000	OPTICAL INSTRUMENTS AND APPLIANCES FOR SURVEYING	253,235	190,291	906,882	2,952,988	1,847,972	1,919,835	2,241,612
9015806000	SEISMOGRAPHS			0	0	9,614	16,074	12,150
9015808040	GEOPHYSICAL INSTRUMENTS AND APPLIANCES, NESOI	116,663	33,659	645,041	281,291	493,183	2,155,910	3,003,969
9015808080	OTHER SURVEYING INSTRUMENTS AND APPLIANCES, EXCLUD	4,083,286	5,680,347	7,761,407	10,363,319	12,080,145	7,353,802	8,192,397
9015900000	PARTS AND ACCESSORIES FOR SURVEYING	0	0	0	0	0	0	0
9017205000	PATTERN GENERATION APPTS DESIGNED TO PRODUCE MASKS	0	14,137	0	0	0	4,987	0
9017207000	OTHER DRAWING, MARKING-OUT OR MATHEMATICAL CALCULAT	301,750		15,927	116,082	256,982	86,725	327,609
9017208040	HAND OPERATED INPUT DEVICES WHICH TRANSMIT POSITIO	971,253	360,773	256,745	2,380,310	4,377,395	22,209,739	15,884,832
9018110040	ELECTROCARDIOGRAPHS	0	0	0	0	0	0	0
9018113000	ELECTROCARDIOGRAPHS	6,692,983	5,062,236	1,755,119	2,335,290	2,173,868	2,047,120	2,977,934
9018116000	PRINTED CIRCUIT ASSEMBLIES FOR ELECTROCARDIOGRAPHS	161,259	51,156	15,709	244,993	1,466,823	768,818	1,225,862
9018119000	PARTS AND ACCESSORIES FOR ELECTROCARDIOGRAPHS,NESOI	1,096,071	607,067	1,323,932	1,250,191	2,029,770	3,720,999	2,131,096
9018120000	ULTRASONIC SCANNING APPARATUS	1,215,910	677,006	1,812,211	7,790,226	12,305,231	12,969,503	16,548,964
9018130000	ELECTRO-DIAGNOSTIC APPARATUS, MAGNETIC RESONANCE	3,491	1,563,572	3,418,426	2,179,719	2,725,702	8,384,621	7,893,531
9018140000	ELECTRO-DIAGNOSTIC APPARATUS, SCINTIGRAPHIC APPARA	0	0	0	22,752	665,616	0	140,710
9018194000	ELECTRO-DIAGNOSTIC APPARATUS FOR FUNCTIONAL EXPLOR	338,610	734,196	1,582,987	1,889,717	2,002,772	2,573,992	2,786,522
9018195500	PATIENT MONITORING SYSTEMS	0	0	0	0	0	0	0
9018197500	PRINTED CIRCUIT ASSEMBLIES FOR PARAMETER ACQUISITI	0	0	2,380	0	59,633	30,503	190,681
9018199535	ELECTROENCEPHALOGRAPHYS (EEG) AND ELECTROMYOGRAPHYS	0	0	16,973	0	0	0	86,890
9018199550	OTHER ELECTRO-DIAGNOSTIC APPARATUS, NESOI	990,333	2,610,494	2,152,911	631,452	1,308,637	1,026,092	2,657,805
9018199560	PART AND ACCESSORIES FOR ELECTRO-DIAGNOSTIC APPARA	17,096,951	20,404,937	29,121,621	27,181,462	31,256,357	43,247,275	62,278,377
9018500000	OTHER OPHTHALMIC INSTRUMENTS AND APPLIANCES AND PA	444,114	927,202	1,017,491	1,102,950	2,295,565	3,114,816	3,989,669
9018901500	OPTICAL INSTRUMENTS AND APPLIANCES AND PARTS AND	0	0	0	0	0	0	0
9018903000	ANESTHETIC INSTRUMENTS AND APPLIANCES AND PARTS AN	266,174	306,636	124,468	381,851	686,406	929,617	1,068,968
9018906000	ELECTRO-SURGICAL INSTRUMENTS AND APPLIANCES AND PA	282,479	1,163,051	1,896,085	1,503,199	6,462,316	7,460,226	10,778,553
9018906400	DEFIBRILLATORS	64,000		57,541	149,714	180,169	517,837	56,406
9018906800	PRINTED CIRCUIT ASSEMBLIES FOR DEFIBRILLATORS OF S	626,657	254,005	7,368	43,639	50,210	286,400	143,097
9018907040	ULTRASONIC THERAPEUTIC APPLIANCES AND INSTRUMENTS	0	0	0	0	0	0	0
9018907060	OTHER THERAPEUTIC APPLIANCES AND INSTRUMENTS, EXCE	0	0	0	0	0	0	0
9018907080	ELECTRO-MEDICAL INSTRUMENTS AND APPLIANCES AND PAR	0	0	0	0	0	0	0
9018907540	ULTRASONIC THERAPEUTIC APPLIANCES AND INSTRUMENTS	0	0	13,129	27,060	2,130	9,750	26,810
9018907560	OTHER THERAPEUTIC APPLIANCES AND INSTRUMENTS, EXCE	68,720	177,969	38,049	220,311	1,789,623	6,676,929	6,348,278
9018908000	OTHER INSTRUMENTS AND APPLIANCES USED IN MEDICAL,	4,637,107	6,265,100	10,335,764	19,288,212	27,062,969	32,790,831	49,716,967
9019102000	MECHANO-THERAPY APPLIANCES AND MASSAGE APPARATUS;	0	0	0	0	0	0	0
9019102010	MECHANO-THERAPY APPLIANCES	4,130,058	7,267,918	6,404,373	5,980,577	5,995,620		
9019102020	MESSAGE APPARATUS; ELECTRICALLY OPERATED; BATTERY	45,616,801	57,143,717	52,454,016	45,509,838	47,736,740		
9019102030	MESSAGE APPARATUS; ELECTRICALLY OPERATED; BATTERY	23,673,605	26,920,956	29,167,828	31,445,218	30,160,194		
9019102035	MESSAGE APPARATUS, POWERED BY AC ADAPTER	64,617,629	59,055,594	88,866,514	49,391,102	59,218,943		
9019102045	MESSAGE APPARATUS,ELECTRICALLY OPERATED (EXCEPT BA	68,762,635	58,999,221	61,484,998	106,000,000	119,000,000		
9019102050	MESSAGE APPARATUS NOT ELECTRICALLY OPERATED	3,855,413	5,610,279	7,337,539	8,698,452	10,635,681		
9019102090	MECHANO-THERAPY APPLIANCES AND MASSAGE APPARATUS;	2,463,215	5,170,865	4,857,231	5,935,675	11,867,170		
9019106000	PSYCHOLOGICAL APTITUDE TESTING APPARATUS AND PARTS	1,173,589	104,575	182,728	198,154	337,480		
9019200000	OZONE THERAPY, OXYGEN THERAPY, AEROSOL THERAPY, AR	13,478,187	14,925,975	21,671,292	28,976,599	40,688,346	65,393,776	100,364,743
9021100090	ORTHOPEDIC OR FRACTURE APPLIANCES & PTS, NESOI			35,218,921	42,058,564	63,750,551	77,213,330	99,477,302
9021110000	ARTIFICIAL JOINTS AND PARTS AND ACCESSORIES	3,109	342,192					
9021198500	OTHER ORTHOPEDIC OR FRACTURE APPLIANCES AND PARTS	16,296,778	23,306,682					
9021300000	OTHER ARTIFICIAL PARTS OF THE BODY AND PARTS AND AC	554,627	679,543					
9021310000	ARTIFICIAL JOINTS AND PARTS AND ACCESSORIES			329,727	1,631,042	2,116,556	2,970,521	3,703,454
9021390000	OTH ARTIFICIAL PTS OF THE BODY & PTS & ACCESSORIES			3,964,777	5,425,480	6,429,690	4,749,236	5,321,106
9021400000	HEARING AIDS, EXCLUDING PARTS AND ACCESSORIES	198,106	1,268,461	4,455,885	5,534,748	1,418,710	2,989,645	52,153,635
9021500000	PACEMAKERS FOR STIMULATING HEART MUSCLES, EXCLUDIN	0	22,380	6,775	67,585	0	0	0
9021904080	PARTS AND ACCESSORIES FOR PACEMAKERS FOR STIMULATI	0	17,078	11,913	11,115	120,147	34,369	39,005
9022120000	APPRTUS BASED USE OF X-RAYS FOR MEDICAL, SURGICAL,	6,045,349	1,877,206	3,747,046	9,030,162	8,885,246	8,573,538	28,800,709
9022130000	APPARATUS BASED ON THE USE OF X-RAYS FOR MEDICAL,	0	0	0	0	0	13,658	167,277
9022140000	APPARATUS BASED ON THE USE OF X-RAYS FOR MEDICAL,	5,403,376	14,704,925	13,239,019	13,347,499	10,519,928	15,622,544	11,222,681
9022190000	APPARATUS BASED ON THE USE OF X-RAYS FOR OTHER USE	175,870	72,010	47,633	5,700	9,500	138,273	281,407
9022210000	APPARATUS BASED ON THE USE OF ALPHA, BETA OR GAMMA	0	0	0	16,690	6,490	227,420	102,404
9022298000	APPARATUS BASED ON THE USE OF ALPHA, BETA OR GAMMA	0	0	0	7,192	0	0	8,652
9022300000	X-RAY TUBES	374,003	406,357	1,017,988	999,725	694,185	860,271	2,962,036
9022900500	RADIATION GENERATOR UNITS	115,000	121,737	633,713	392,569	343,230	602,203	285,379
9022902000	HIGH TENSION GENERATORS, CONTROL PANELS, DESKS, SC	0	0	0	0	0	0	0
9022904000	PARTS AND ACCESSORIES OF X-RAY TUBES	31,561	19,207	24,182	121,914	86,877	97,244	295,981
9022907000	PARTS AND ACCESSORIES OF SMOKE DETECTORS, IONIZATI	2,215,774	2,328,074	2,260,632	2,100,593	786,164	418,350	77,138
9022909500	PARTS AND ACCESSORIES OF HIGH TENSION GENERATORS,	56,925	136,024	109,820	149,596	513,980	1,560,500	1,618,553
9024100000	MACHINES AND APPLIANCES FOR TESTING METALS	302,739	455,136	509,272	493,569	828,228	1,146,782	1,035,372
9024800000	OTHER MACHINES AND APPLIANCES FOR TESTING THE HARD	292,735	168,357	192,962	309,276	500,513	643,524	670,128
9024900000	PARTS AND ACCESSORIES FOR MACHINES & APPLIANCES FO	0	0	0	0	0	0	0

US Imports of Advanced Technology Products From China

HS Code	Commodity Description	2000	2001	2002	2003	2004	2005	2006
9027202000	GAS CHROMATOGRAPHS	0	0	0	0	0	0	0
9027205030	ELECTRICAL ELECTROPHORESIS INSTRUMENTS	0	0	0	0	0	0	0
9027206050	LIQUID CHROMATOGRAPHS	0	0	0	0	0	0	0
9027209000	CHROMATOGRAPHS AND ELECTROPHORESIS INSTRUMENTS, NE	0	0	0	0	0	0	0
9027308020	SPECTROSCOPES, EXCEPT ELECTRICAL USING OPTICAL RAD	0	0	0	16,000	7,700	15,930	57,500
9027502000	THERMAL ANALYSIS INSTRUMENTS AND APPARATUS	0	0	0	0	0	0	0
9027504050	ELECTRICAL PHOTOMETERS USING OPTICAL RADIATIONS	0	0	9,000	4,802,144	510,120	557,030	851,816
9027505000	OTHER CHEMICAL ANALYSIS INSTRUMENTS AND APPARATUS,	0	0	0	0	0	0	0
9027509000	INSTRUMENT AND APPARATUS FOR PHYSICAL OR CHEMICAL	0	0	0	0	0	0	0
9027801000	NUCLEAR MAGNETIC RESONANCES INSTRUMENTS AND APPARA	0	0	0	0	0	0	0
9027802000	MASS SPECTROMETERS	0	0	0	0	0	0	0
9027803100	ELECTROCHEMICAL INSTRUMENTS AND APPARATUS,	0	0	0	0	0	0	0
9027803200	CHEMICAL ANALYSIS INSTRUMENTS AND APPARATUS, NESOI	0	0	0	0	0	0	0
9027808000	INSTRUMENTS AND APPARATUS FOR MEASURING/CHECKING V	0	0	0	0	0	0	0
9027902000	MICROTOMES	594,085	656,527	642,379	395,536	529,027	554,200	525,004
9027905430	PARTS AND ACCESSORIES OF ELETRICAL INSTRUMENTS AND	0	0	0	0	0	0	0
9027905440	PARTS AND ACCESSORIES OF ELETRICAL INSTRUMENTS AND	0	0	0	0	0	0	0
9027908950	PARTS AND ACCESSORIES OF INSTRUMENTS & APPARATUS F	0	0	0	0	0	0	0
9029206000	STROBOSCOPES	2,094	81,699	30,815	56,634	65,760	43,025	486,169
9030100000	INSTRUMENTS AND APPARATUS FOR MEASURING OR DETECTI	102,365	161,328	88,264	345,100	1,135,411	176,085	27,468
9030200000	CATHODE-RAY OSCILLOSCOPES AND CATHODE-RAY OSCILLOG	227,112	341,625	195,904	157,171	429,725	511,076	584,085
9030310000	MULTIMETERS	14,433,241	11,186,029	14,337,698	23,292,959	41,848,180	49,332,020	55,383,108
9030390040	APPARATUS TO TEST VOLTAGE OR CURRENT OR RESISTANCE	11,268,641	12,589,101	16,215,888	19,663,342	21,090,758	21,043,757	28,798,011
9030390080	OTHER INSTRUMENTS AND APPARATUS FOR MEASURING OR C	4,437,401	5,022,184	4,640,999	4,430,711	4,351,610	9,746,025	7,318,204
9030400000	OTHER INSTRUMENTS AND APPARATUS, SPECIALLY DESIGNE	13,902,942	12,205,283	8,733,627	8,404,956	13,251,858	13,412,514	21,287,027
9030820000	INSTR AND APPAR FOR MEASURING OR CHECKING SEMICOND	780,044	268,679	580,292	4,802,646	12,492,209	4,446,753	31,172,620
9030906400	PRINTED CIRCUIT ASSEMBLIES OF INSTRUMENTS AND APPA	168,296	253,978	81,544	131,879	1,304,206	1,833,342	11,209,275
9030906800	PRINTED CIRCUIT ASSEMBLIES EXCEPT FOR 9030.10,NESO	1,268,782	1,736,098	1,187,826	1,632,913	5,967,315	4,740,122	11,835,588
9031410000	OPTICAL INSTRUMENTS FOR INSPECTING SEMICONDUCTOR	0	0	0	0	0	0	0
9031410020	OPTICAL INSTRUMENTS AND APPLIANCES FOR INSPECTING	4,000	6,000	9,796	0	0	8,295	0
9031410040	OTHER OPTICAL INSTRUMENTS AND APPLIANCES FOR INSP	200,000	0	10,438	14,417	383,365	419,103	13,737
9031410060	OPTICAL INSTRUMENTS AND APPLIANCES FOR INSPECTING	6,900	21,497	24,786	184,745	20,148	117,875	282,642
9031494000	COORDINATE-MEASURING MACHINES	3,590	4,800	4,712	893,620	662,830	225,754	471,422
9031804000	ELECTRON BEAM MICROSCOPES FITTED WITH EQUIPMENT SP	0	105,604	38,396	101,127	17,227	0	616,900
9031808060	EQUIPMENT FOR TESTING ELECTRICAL CHARACTERISTICS O	0	0	0	0	0	0	0
9031900000	PARTS & ACCESSORIES OF MACHINES, NESOI IN THIS CHA	0	0	0	0	0	0	0
9032100000	THERMOSTATS	0	0	0	0	0	0	0
9032100030	THERMOSTATS, AIR COND, REFG/HEATING SYS WALL MOUNT	0	0	30,074,053	43,450,733	67,255,379	94,310,255	98,833,747
9032100060	THERMOSTATS AIR COND, REFG/HEAT SYS EXC WALL MOUNT	0	0	6,732,072	11,019,807	14,416,809	15,847,604	19,141,983
9032100090	THERMOSTATS, NESOI	0	0	17,427,236	19,509,007	23,396,098	32,515,426	40,165,194
9032810040	HYDRAULIC OR PNEUMATIC INDUSTRIAL PROCESS CONTROL	0	0	0	0	0	0	0
9032810080	HYDRAULIC AND PNEUMATIC INSTRUMENTS AND APPARATUS	423,457	12,273	354,556	1,151,435	1,366,349	1,156,188	1,276,491
9032893000	AUTOMATIC VOLTAGE AND VOLTAGE-CURRENT REGULATORS	0	0	0	0	0	0	0
9032896020	CONTROL INSTRUMENTS FOR AIR CONDITIONING, REFRIGER	0	0	0	0	0	0	0
9032896030	PROCESS CONTROL INSTRUMENTS AND APPARATUS FOR COMP	10,000	20,200	144,233	5,720	39,998	690,442	718,491
9032896040	PROCESS CONTROL INSTRUMENTS AND APPARATUS FOR TEMP	3,917,450	4,294,146	17,169,006	15,256,984	6,012,272	2,459,782	16,316,092
9032896050	PROCESS CONTROL INSTRUMENTS AND APPARATUS FOR PRES	121,982	65,855	94,896	553,983	718,639	952,949	749,895
9032896060	PROCESS CONTROL INSTRUMENTS AND APPARATUS FOR FLOW	1,605,350	2,299,643	2,192,175	5,428,537	18,443,380	9,219,177	5,505,950
9032896070	PROCESS CONTROL INSTRUMENTS AND APPARATUS FOR HUMI	2,938,745	497,115	1,286,212	1,688,214	1,986,017	2,164,453	557,126
9032896075	OTHER PROCESS CONTROL INSTRUMENTS AND APPARATUS, N	1,207,187	1,368,550	1,242,422	1,163,003	5,553,815	9,590,522	12,525,335
9301200000	ROCKET LAUNCHERS & SIMILAR PROJECTORS (MIL)	0	0	0	0	0	0	0
9304002000	RIFLES WHICH EJECT MISSILES BY RELEASE OF COMPRESSE	2,017,581	2,338,181	2,355,568	1,684,927	3,791,067	8,549,083	22,036,068
9304006000	OTHER ARMS, EXCLUDING THOSE OF HEADING 9307, NESOI	281,599	476,369	372,816	758,443	850,898	1,175,701	1,793,152
9305108000	PARTS AND ACCESSORIES OF REVOLVERS AND PISTOLS, NE	0	22,769	179,050	716,918	568,292	970,430	1,761,327
9305905000	PARTS AND ACCESSORIES FOR ARTICLE OF SUBHEADING 93	690,427	362,777	0	0	0	0	0
9305995000	PARTS FOR SUBHEADING 9304.00.20 OR 9304.00.40	0	0	2,082,184	4,616,903	4,333,326	4,036,280	11,538,345
9306308000	PARTS OF CARTRIDGES, NESOI	2,725	0	0	0	174,550	19,050	403,407
9306900020	GUIDED MISSILES	0	0	0	0	0	0	0
9306900040	BOMBS, GRENADES, TORPEDOS, & SIML MUNITIONS OF WAR	0	0	16,314	38,088	67,668	67,643	333,248
9306900060	PARTS FOR GUIDED MISSILES	0	0	0	0	0	0	0
9306900080	PARTS FOR BOMBS, GRENADES, & SIML MUNITIONS OF WAR	0	0	0	0	33,213	25,446	23,119
9810006000	INST & APPRTS NT MFGR IN USA FOR NONPROFIT INST	0	0	35,085	29,972	40,000	21,840	122,763

US Department of Commerce, Bureau of the Census and MBG Information Services

US Balances in Advanced Technology Products Trade With China

HS Code	Commodity Description	2000	2001	2002	2003	2004	2005	2006
	<b>Totals</b>	<b>(\$6,949,762,690)</b>	<b>(\$6,121,098,466)</b>	<b>(\$11,810,141,707)</b>	<b>(\$21,073,577,384)</b>	<b>(\$36,259,102,362)</b>	<b>(\$46,962,958,379)</b>	<b>(\$55,081,606,087)</b>
2844200020	URANIUM FLUORIDE ENRICHED IN U235	0	(10,799,667)	(95,000,000)	(99,000,000)	(72,942,160)	(72,941,994)	(48,112,459)
2844302060	URANIUM COMPOUNDS DEPLETED IN U235, NESOI	0	52,378	72,700	35,160	11,120	162,316	193,785
2844305000	MIXTURES CONTAIN URANIUM DEPLETED IN U235, NESOI					25,999	42,796	527,369
2844400010	ELEMENTS, ISOTOPES AND COMPOUNDS WITH COBALT-60 RA	2,755	53,712	2,766	25,130	709,666	899,868	198,073
2844400020	RADIOACTIVE ELEMENTS, ISOTOPES AND COMPOUNDS OTHER	970,005	(454,459)	2,592,088	2,185,221	1,605,408	1,403,607	1,429,654
2844400050	ALLOYS, DISPERSIONS, CERAMIC PRODUCTS & MIXTURES C	242,996	350,786	(169,436)	(749,558)	(1,269,629)	(483,822)	(1,481,190)
2845900000	ISOTOPES, EXCEPT THOSE OF HDG 2844; COMPOUNDS, INO	(494,072)	(431,709)	(2,550,686)	(3,437,579)	(2,229,873)	(2,382,498)	(1,569,176)
2914692000	QUINONE DRUGS	(21,805)	17,565	21,311	(573)	72,899	(9,570,799)	(5,885,313)
2918903000	AROMATIC DRUGS	(5,532)	(12,307)	(13,750)	(88,331)	(109,053)	(167,199)	(166,098)
2921460000	AMFETAMINE, BENZFETAMINE(INN) ETC & SALTS THEREOF						0	2,961
2921494300	AROMATIC MONOAMINE DRUGS, NESOI	(276,641)	(37,500)	(37,500)	(74,980)	(20,594)	(28,894)	(20,300)
2922190900	AROMATIC AMINO-ALCOHOLS,ETC USED AS DRUGS,NESOI			(93,250)	(86,634)	(51,315)	(97,154)	(27,806,086)
2922191800	OTHER AROMATIC AMINO-ALCOHOLS, THEIR ETHERS AND ES	(47,021)	(49,086)					
2922292700	AMINO-NAPHTHOLS AND AMINO-PHENOLS,ETC USED AS DRUG	(259,050)	(153,920)	(331,596)	(613,391)	(169,426)	(338,847)	(165,943)
2922492600	AROMATIC AMINO-ACIDS ETC FOR USE AS DRUGS			(686,296)	(1,566,633)	(1,489,162)	(1,422,574)	(1,245,781)
2922492700	AROMATIC AMINO-ACIDS AND THEIR ESTERS,OTHER THAN T	(280,776)	(467,665)					
2922501400	OTHER AROMATIC CARDIOVASCULAR DRUGS	(36,000)	(46,602)	(63,550)	(66,442)	(66,687)	(71,755)	(136,398)
2922502500	OTHER AROMATIC AMINO-ALCOHOL-PHENOL DRUGS	(35,665)	(21,301)	(769,169)	(970,744)	(1,132,421)	(1,861,380)	(3,259,614)
2924296250	OTHER AROMATIC CYCLIC AMIDES AND DERIVATIVES FOR U	(234,493)	(1,151,489)	(574,522)	(1,980,627)	(4,698,920)	(5,782,741)	(1,620,646)
2928003000	NON-AROM ORGAN DERIV OF HYDRAZINE ETC USED AS DRUG					0	85,780	0
2930909030	OTHER NON-AROMATIC ORGANO-SULFUR COMPOUNDS USED PR	(13,103)	0	0	(24,698)	(125,982)	(76,659)	(70,788)
2930909035	OTHER NON-AROMATIC ORGANO-SULFUR COMPOUNDS USED AS	(824,635)	(456,192)	(411,571)	(1,089,357)	(78,591)	(55,414)	(107,668)
2931002200	AROMATIC ORGANO-INORGANIC COMPOUNDS USED AS DRUGS	(902,400)	(541,440)	(541,440)	(1,141,804)	(695,310)	(892,584)	(964,919)
2932191000	AROMATIC COMPOUNDS CONTAINING AN UNFUSED FURAN RIN	(135,039)	(60,808)	(41,760)	(58,194)	(61,594)	(187,304)	(793,156)
2932292000	AROMATIC LACTONES USED AS DRUGS	(63,590)	(53,061)	(46,243)	(58,224)	(60,799)	(161,649)	(151,914)
2932910000	ISOSAFROLE		6,598	0	0	0	4,650	0
2932920000	1-(1,3-BENZODIOXOL-5-YL)PROPAN-2-ONE	0	38,611	1,970,670	0	1,667,307		
2932950000	TETRAHYDROCANNABINOLS (ALL ISOMERS)						0	462,000
2932995500	BIS-O-[(4-METHYL PHENYL)-METHYLENE]-D-GLUCITOL (DI	(553,919)	(169,514)	0	0	(944,745)	(27,535)	(55,900)
2932996550	AROMATIC PESTICIDES WITH OXYGEN HETERO-ATOM(S) ON	1,255,625	4,115					
2932996560	AROMATIC PESTICIDES WITH OXY HETERO-ATOM(S) NESOI			5,214	0	35,886	458,405	990,930
2932997000	OTHER AROM HETERO ETC EXCL PROD IN U.S. NT 3 SEC 6	(567,000)	(2,057,488)	(2,601,453)	(5,330,995)	(4,218,824)	(9,478,555)	(36,230,129)
2933193500	AROMATIC OR MOD AROM DRUGS CONT AN UNFUSED PYR ETC			(266,464)	(374,935)	(78,360)	(436,688)	(396,071)
2933292000	AROMATIC OR MODIFIED AROMATIC DRUGS CONTAINING AN	0	(40,000)	(14,998)	(6,863)	(54,173)	(180,450)	(105,600)
2933294500	DRUGS (EXCLUDING AROMATIC OR MODIFIED AROMATIC) CO	(46,600)	(326,730)	(3,526)	(51,700)	(205,367)	(340,547)	(26,700)
2933330000	ALFENTANIL, AMILERIDINE, BEZITRAMIDE(INN), ETC.					(37,520)		
2933394100	DRUGS CONTAINING AN UNFUSED PYRIDINE RING (WHETHER	(297,631)	(301,457)	(190,299)	(412,051)	(572,977)	(210,020)	(299,740)
2933402000	5-CHLORO-7-IODO-8-QUINOLINOL (ODOCHLORHYDROXYQUIN	(1,811,795)	(1,181,829)					
2933402600	OTHER DRUGS CONTAINING A QUINOLINE OR ISOQUINOLINE	(3,450)	(12,708)					
2933410000	LEVORPHANOL (INN) AND ITS SALTS			0	(12,650)			
2933490800	4,7-DICHLOROQUINOLINE			(511,851)	(670,225)	(208,136)	0	(79,500)
2933492000	ODOCHLORHYDROXYQUIN; DECOQUINATE ETC					(19,800)		
2933492600	DRUGS CONT A QUINOLINE OR ISOQUINOLINE ETC, NESOI			(1,037,412)	(564,186)	(1,803,337)	(1,274,631)	(1,947,496)
2933550000	LOPRAZOLAM (INN), MECLOQUALONE (INN), ETC & SALTS						0	7,500
2933592100	ANTIHISTAMINES, INCLUDING ANTINAUSEANTS						0	(11,250)
2933593600	OTHER AROMATIC OR MODIFIED AROMATIC ANTI-INFECTIVE	(6,840)	(8,930)	(10,715)	(601,629)	(1,114,960)	(1,089,386)	(566,065)
2933595300	OTHER AROMATIC OR MODIFIED AROMATIC DRUGS CONTAIN	(12,550)	(19,078)	(24,452)	(15,802)	0	(14,534)	(9,318)
2933595900	OTHER DRUGS (EXCLUDING AROMATIC OR MODIFIED AROMAT	(174,460)	(70,669)	(57,300)	(271,378)	(14,750)	(190,809)	(491,220)
2933595950	DRUGS CONTAINING A PYRIMIDINE RING (WHETHER OR NOT	8,007	5,767					
2933595960	DRUGS CONT A PYRIMIDINE OR PIPERAZINE RING ETC			4,254	89,492	1,098,473	632,526	2,391,669
2933904600	OTHER ANTI-INFECTIVE AGENTS	0	(5,750)					
2933905300	OTHER CARDIOVASCULAR DRUGS	1,569,021	(331,644)					
2933905590	OTHER ANALGESICS, ANTIPTYRETS AND NON-HORMONAL AN	(448,115)	(231,766)					
2933906500	ANTICONSULSANTS, HYPNOTICS & SEDATIVES W/HETEROCYC	(1,400,885)	(1,369,144)					
2933907000	OTHER DRUGS PRIMARILY AFFECTING THE CENTRAL NERVOU	0	(13,278)					
2933910000	ALPRAZOLAM, CAMAZEPAM, CHORDIAZEPOXIDE (INN), ETC.			(160,852)	22,728	(122,283)	(256,247)	(392,328)
2933994600	ANTI-INFECTIVE AGENTS, NESOI			184,381	(24,619)	324,450	1,016,392	(456,144)
2933995300	CARDIOVASCULAR DRUGS, NESOI			(416,480)	176,945	1,853	3,972	17,654
2933995500	ANALGESICS, ANTIPTYRETS AND NON-HORMONAL ETC			0	4,500	0	0	25,500
2933995590	ANALGESICS, ANTIPTYRETS & NON-HORMONAL AGTS NESOI			(57,556)	(8,284)	(8,100)	(57,558)	(101,315)
2933996100	ANTIDEPRESSANTS, TRANQUILIZERS ETC, NESOI			2,470	(141,581)	(52,275)	(136,355)	10,643
2933996500	ANTICONSULSANTS, HYPNOTICS AND SEDATIVES			(1,703,232)	(1,111,860)	(83,000)	(2,139,469)	(2,360,180)
2933997000	DRUGS PRIM AFFECT THE CENT NERV SYSTEM, NESOI			126,395	344,964	338,514	642,018	1,327,650
2934302700	DRUGS W/ A PHENO RING SYS (W/T HYDRO), NESOI			(2,233)	0	0	(6,800)	0
2934903000	OTHER HETEROCYCLIC COMPOUNDS USED AS DRUGS	(5,409,446)	(410,435)					
2934910000	AMINOREX, BROTILOZOLAM, CLOTIAZEPAM (INN) ETC.			(228,196)	(268,979)	(129,550)	(190,552)	(555,493)
2934993000	HETEROCYC CMDPS. USED AS DRUGS, NESOI			(305,093)	(453,695)	(1,018,921)	(3,691,367)	(2,641,599)
2937100000	PITUITARY (ANTERIOR) OR SIMILAR HORMONES	(196,645)	(106,300)					
2937110000	SOMATOTROPIN, ITS DERIVS & STRUCT ANALOGUES			(50,750)	(70,000)	(587,235)	(3,171,700)	(1,213,350)
2937190000	POLYPEPTIDE, PROTEIN & GLYCOPROTEIN HORMONES,NESOI			(140,480)	(922,437)	(204,157)	53,406	14
2937230000	ESTROGENS AND PROGESTINS			25,838	37,975	261,642	116,915	0
2937231010	ESTROGENS OF ANIMAL OR VEGETABLE ORIGIN			(41,279)	(282,404)	(501,923)	(327,631)	(479,646)
2937231050	PROGESTINS OF ANIMAL OR VEGETABLE ORIGIN, NESOI			(45,299)	(95,840)	(71,093)	(5,736)	(43,102)
2937235010	ESTROGENS NOT DERIV FROM ANIMAL OR VEGETABLE MATER			(120,316)	(280,835)	(45,800)	(45,500)	(63,575)
2937235020	PROGESTERONE NOT DERIV FR ANIMAL OR VEGETABLE MATER			(1,164,678)	(604,221)	(524,364)	(1,126,660)	(1,061,260)
2937235050	PROGESTINS NOT OF ANIMAL OR VGTABLE ORIGIN, NESOI			(227,623)	(273,528)	(228,382)	(226,153)	(201,620)
2937399000	CATECHOLAMINE HORMONES, DERIVS & ANALOGUES NESOI			0	(77,796)	(219,256)	(495,917)	(647,755)
2937409000	HORMONE AMINO-ACID DERIVATIVES, NESOI			(109,730)	(116,128)	(356,497)	(846,701)	(4,335,707)
2937500000	PROSTAGLANDINS, THROMBOXANES & LEUKOTRIENES			0	(5,270)			
2937900000	HORMONES, PROSTAGLANDINS, ETC NESOI			(8,214,681)	(9,527,759)	(5,192,654)	(4,713,499)	(5,891,376)
2937920000	ESTROGENS AND PROGESTINS	6,650	0					
2937921010	ESTROGENS OF ANIMAL OR VEGETABLE ORIGIN	(4,435)	(74,115)					
2937921050	OTHER PROGESTINS OF ANIMAL OR VEGETABLE ORIGIN	(42,640)	(82,150)					
2937925010	ESTROGENS NOT DERIVED FROM ANIMAL OR VEGETABLE MAT	(12,285)	0					
2937925020	PROGESTERONE NOT DERIVED FROM ANIMAL OR VEGETABLE	(563,824)	(826,993)					
2937925050	OTHER PROGESTINS NOT DERIVED FROM ANIMAL OR VEGETA	(51,274)	(228,182)					
2937999550	OTHER HORMONES AND THEIR DERIVATIVES, OTHER STEROI	(4,148,226)	(6,018,550)					
2940002000	D-ARABINOSE	45,224	(3,070)	(956)	22,419	(36,518)	(239,355)	(17,325)
2940006000	OTHER SUGARS, NESOI EXCL D-ARABINOSE	(2,954,684)	(2,653,760)	(2,817,397)	(4,435,058)	(7,439,688)	(13,332,027)	(14,445,613)
3002100030	HUMAN IMMUNE BLOOD SERA	0	61,146					
3002100040	FETAL BOVINE SERUM (FBS)	452,826	227,113					
3002100060	OTHER BLOOD FRACTIONS NOT ELSEWHERE SPECIFIED OR I	1,901,263	3,380,810					
3002100090	OTHER BLOOD FRACTIONS NOT ELSEWHERE SPECIFIED OR I	(1,298,855)	(1,806,450)					
3002100130	HUMAN IMMUNE BLOOD SERA			364,824	227,522	0	182,064	0

US Balances in Advanced Technology Products Trade With China

HS Code	Commodity Descriptor	2000	2001	2002	2003	2004	2005	2006
3002100140	FETAL BOVINE SERUM (FBS)			344,814	560,379	9,959	13,166	47,400
3002100190	BLOOD FRACTIONS NESOI			1,856,585	3,452,436	(3,989,385)	3,804,529	467,453
3002200000	VACCINES FOR HUMAN MEDICINE	243,767	66,269	25,000	667,508	178,553	375,600	997,302
3002300000	VACCINES FOR VETERINARY MEDICINE	3,275,660	4,946,244	6,257,775	5,691,304	5,351,483	9,965,735	12,394,649
3002900500	OTHER TOXINS, CULTURES OF MICRO-ORGANISMS (EXCLUDING ANTIALLERGENIC PREPARATIONS, NESOI)	(125,970)	(560,993)					
30029005120	HUMAN BLOOD;ANIMAL BLOOD PREPARED FOR THERAP,NESOI			80,098	78,597			
30029005150	HUMAN BLOOD;ANIMAL BLOOD PREPARED FOR THERAP,NESOI			205,580	220,931	753,289	712,514	1,259,668
3004909090	MEDICAMENTS NOT ELSEWHERE SPECIFIED OR INCLUDED	(264,073)	(691,460)					
3004909190	MEDICAMENTS IN MEAS DOSES FOR RETAIL SALE, NESOI			(2,751,155)	(2,329,295)	(1,889,899)	(2,183,052)	(1,647,568)
3818000000	CHEMICAL ELEMENTS DOPED FOR USE IN ELECTRONICS, IN	6,595,409	8,862,114	10,741,089	26,089,378	38,146,081	24,458,123	89,404,701
3818000010	GALLIUM ARSENIDE WAFERS, DOPED	(226,180)	(53,530)	(1,138,949)	(23,000,000)	(19,699,388)	(14,034,043)	(20,032,223)
3818000090	OTHER CHEMICAL ELEMENTS DOPED FOR USE IN ELECTRONI	(10,444,420)	(5,484,211)	(3,665,508)	(12,000,000)	(12,011,277)	(14,854,731)	(19,556,367)
8401100000	NUCLEAR REACTORS	0	31,630	255,600	255,600	200,000	0	(79,989)
8401200000	ISOTOPIC SEPARATION MACHINERY AND APARATUS AND PAR	2,659,230	1,395,359	1,037,369	1,621,993	3,510,843	1,105,666	57,384
8401300000	FUEL ELEMENTS (CARTRIDGES), NON-IRRADIATED FOR NUC	114,350	549,184	0	210,905	79,699	484,495	28,273
8401400000	PARTS OF NUCLEAR REACTORS	398,487	1,844,695	67,688	131,143			
8411114010	TURBOJET AIRCRAFT TURBINES (ENGINES) FOR USE IN CI	463,501	57,793,850	27,357,481	8,000,450	267,119	6,716	5,162,591
8411114050	TURBOJET A/C TURBINES EXC CIVIL, THRUST LE 25 KN			0	5,604			
8411124000	TURBOJET AIRCRAFT ENGINES, THRUST EXCEEDING 25 KN			0	(5,227,484)	(12,400,000)		(1,775,000)
8411124010	TURBOJET TBN FOR CIVIL AIRCRAFT, THRUST OV 25 KN	41,950,388	52,109,172	124,000,000	172,000,000	96,729,584	85,361,574	106,726,320
8411214010	TURBOPROPELLER A/C TBN, CIVIL, POWER NOT OV 1100KW			0	0	0		3,391,948
8411224000	TURBOPROPELLER AIRCRAFT ENGINES, POWER EXC 1100 KW	(247,500)	0	0	0	0	(76,650)	0
8411224010	TURBOPROPELLER A/C TBN, POWER OVER 1100 KW					112,500	0	250,580
8411814000	GAS TURBINE A/C ENGINES,NESOI,POWER NOT EXC 5000KW					0	(750,000)	0
8411814010	GAS TURBINE A/C TBN FOR CIVIL A/C, 5000 KW AND UND	769,594	2,003,000	150,000	975,325	180,000	959,739	2,072,356
8411824010	GAS TURBINE A/C TURBINE FOR CIVIL A/C, OVER 5000 K			0	14,800,000	7,000,000	8,080,960	2,260,000
8411824050	AIRCRAFT TURBINES (ENGINES), EXCEPT FOR USE IN CIV	15,600	0	0	0	0	0	0
8411917010	PARTS OF TURBOJETS AND TURBOPROPELLER AIRCRAFT ENG	27,402,280	32,677,607	48,328,512	49,075,130	50,047,240	44,645,887	69,668,595
8411917050	PARTS OF TURBOJET AND TURBOPROPELLER AIRCRAFT ENGI	225,607	1,528,049	595,677	589,693	199,547	883,552	693,491
8411919080	PARTS, NESOI, OF TURBOJET OR TURBOPROPELLER AIRCRA	(26,136,831)	(25,414,570)	(25,000,000)	(28,000,000)	(52,721,761)	(68,893,841)	(97,170,317)
8411997010	PARTS OF GAS TURBINE AIRCRAFT ENGINES FOR USE IN C	7,471,545	15,034,306	2,882,493	2,411,974	2,878,844	3,709,877	19,333,145
8411997050	PARTS OF GAS TURBINE AIRCRAFT ENGINES, OTHER THAN	2,442,950	379,247	3,606,164	10,064,488	3,576,662	6,339,785	2,472,094
8411999090	PARTS,NESOI,OF AIRCRAFT GAS TURBINES, EXCEPT TURBO	(3,219,054)	(3,174,644)	(3,586,293)	(4,133,294)	(6,384,189)	(7,911,907)	(8,841,330)
8424893000	SPRAYING APPLIANCES FOR ETCHING, STRIPPING OR CLEA	1,663,171	2,613,151	5,340,068	8,284,681	5,819,591	5,803,180	4,702,133
8424895000	SPRAYING APPLIANCES DEVELOPING SEMICONDUCTOR WAFER					0	(335,435)	(461,276)
8427108060	AUTOMATED GUIDED VEHICLES (AGV) FITTED WITH LIFTIN	225,714	176,000	1,792,012	156,407	260,904	7,886	1,296,771
8428900010	INDUSTRIAL ROBOTS FOR LIFTING, HANDLING, LOADING O	(172,458)	(64,594)	(168,458)	0	(10,000)	(720,354)	(335,060)
8428900015	INDUSTRIAL ROBOTS FOR LIFTING, HANDLING, LOADING O	309,775	1,599,715	6,078,346	1,886,839	2,749,471	7,464,154	5,119,375
8456100000	MACHINE TOOLS FOR WORKING ANY MATERIAL BY REMOVAL	16,759,971	12,248,076	22,452,149	8,475,739	19,904,100	13,869,348	20,162,476
8456101010	MACHINE TOOLS FOR WORKING METAL, BY LASER OR OTHER	0	(40,299)	0	(133,100)	0	(23,000)	(619,873)
8456101020	MAC TOOL,MTL WRK,LASER,LIGHT OR PHOTON BEM,EXC,N/C					(55,550)	(71,827)	0
8456106000	MACH TOOLS USE IN SEMICONDUCTOR WAFER PRODUCTIONS	(28,500)	0	(19,000)	0	(40,240)		
8456108000	MACHINE TOOLS OPERATED BY LASER PROCESSES, NESOI					(81,939)	(246,704)	(468,683)
8456200000	MACHINE TOOLS FOR WORKING ANY MATERIAL BY REMOVAL	68,269	30,345	2,712,949	2,052,003	1,503,811	277,972	135,996
8456201050	MACHINE TOOLS FOR WORKING METAL, BY ULTRASONIC PRO	(2,880)	(10,810)	0	0	(15,023)		
8456205000	MACH TOOLS, EXC MTL WRK, ULTRASONIC PROCESSES			(38,250)		0		(67,208)
8456300000	ELECTRO-DISCHARGE MACHINE TOOLS FOR REMOVING MATL	295,135	1,390,217	2,078,617	1,106,295	1,343,153	1,939,826	894,263
8456301020	MAC TOOL,MTL WRK,ELECTRO-DISCHR, TRAVEL WIRE TYPE	(5,011,900)	(108,055)	(900,160)	(241,423)	(810,564)	(140,600)	(1,779,626)
8456301050	MC TL,MTL WRK,ELECTRO-DSCHRG PROCES,EX TVL-WIRE,N/C	(2,515,468)	(4,639,061)	(541,293)	(719,918)	(4,793,307)	(12,176,248)	(9,607,858)
8456301070	MC TL,MTL WRK,ELTRO-DSCHRG PROC,EX TVL-WIRE,EX N/C			(208,846)	0	(263,234)	(42,170)	(252,928)
8456305000	MACHINE TOOLS FOR WORKING MATERIAL OTHER THAN META	(2,200)	0	(21,555)	(35,642)	(72,932)	(125,463)	(26,977)
8456910000	DRY ETCHING (INCLUDING PLASMA) MACHINES DESIGNED T	30,338,172	31,179,637	81,830,194	37,389,295	199,000,000	76,892,364	203,861,740
8456991000	FOCUSED ION BEAM MILLING MACHINES TO PRODUCE OR RE	39,135	356,000	420,190	716,000	265,186	652,335	1,603,340
8456993005	MACHINE TOOLS FOR WORKING METAL, OF A KIND USED FO	0	790,258	769,798	62,499	133,880	1,191,410	357,074
8456993040	MACHINE TOOLS FOR WORKING METAL, BY ELECTRON BEAM O	2,517,134	546,083	2,222,224	716,168	1,061,474	3,897,713	6,669,724
8456993060	MACHINE TOOLS FOR WORKING METAL, OF A KIND USED FO	0	31,324	40,598	38,835	32,031	56,760	58,611
8456993080	MACHINE TOOLS FOR WORKING METAL, BY ELECTRON BEAM,	(41,500)	27,473	60,400	(7,800)	0	13,960	810,857
8456995000	MACHINE TOOLS FOR WORKING ANY MATERIAL OTHER THAN	2,583,129	910,611	1,909,601	2,342,525	5,088,347	5,534,211	4,909,119
8456997000	MACH TOOLS FOR STRIPPING/CLEAN SEMICONDUCTOR WAFER			0	(16,000)	(102,500)	(891,100)	(302,520)
8456999000	MACH TL ELECTRO-CHEM,BEAM,IONIC-BEAM,PLSM NESOI	(2,800)	(6,002)	(4,438)	(3,019)	(79,132)	(86,126)	(393,909)
8457100015	MAC CENTR,AUTO TOOL CHNG,VERT-SPIN,Y-AXIS N/O 660MM	1,877,154	3,682,709	2,119,540	6,790,825	7,653,677	11,794,543	1,316,812
8457100025	MAC CENTR,AUTO TOOL CHNG,VERT-SPIN,Y-AXIS OV 660MM	89,000	508,606	520,623	333,000	1,015,718	2,416,621	1,680,791
8457100035	MACHING CENTERS, AUTO TOOL CHNG, EXCEPT VERTICAL	1,061,500	0	1,290,685	769,478			
8457100036	HORIZONTAL MACHING CENTERS WITH ATC					3,714,223	2,071,100	1,720,740
8457100039	MACHING CENTERS, AUTO TOOL CHNG, NESOI					3,294,718	3,427,575	4,386,991
8457100060	HORIZONTAL SPINDAL MACHINES (685MM-1016MM)			(165,870)	0			
8457100065	HORIZONTAL SPINDAL MACHINES GT 1016 MM						0	(1,959,660)
8457100070	MACHING CENTERS, AUTO TOOL CHNG, NESOI					(88,902)	(89,502)	0
8457200010	UNIT CONSTRUCTION MACHINES (SINGLE STATION), N/C	1,648,785	15,760,500	26,703,414	1,327,843	688,332	0	1,681,800
8457300010	MULTISTATION TRANSFER MACHINES, N/C			0	0	0	0	(35,000)
8458110010	HORIZONTAL LATHES, MULTIPLE SPINDLE, METAL REMOVIN	594,096	0	0	369,042	354,045	409,408	786,508
8458110030	HORIZONTAL LATHES, EXCEPT MULTIPLE SPINDLE, METAL	1,191,499	15,487,937	2,100,069	(16,034)	284,652	325,046	10,362,510
8458110050	HORIZONTAL LATHES, EXCEPT MULTIPLE SPINDLE, METAL	2,659,062	473,073	1,173,992	488,235	(146,552)	556,658	(2,934,430)
8458110090	HORIZONTAL LATHES, EXCEPT MULTIPLE SPINDLE, METAL	(133,717)	71,385	320,000	(21,400)	107,858	189,441	4,382,185
8458911060	VERTICAL TURRET LATHES, METAL REMOVING, NUMERICALL	(113,075)	0	0	0	0	(166,134)	0
8458911080	VERT TURT LATH,MTL REMOV, N/C, EXC MULTI SPIN, NEW					173,708		
8458915050	LATHES FOR REMOV MTL, N/C, MULIT SPIN, NEW, NESOI	0	91,988	0	0	0	0	0
8458915070	LATHES FOR REMOV MTL,N/C,EXC MULTI SPIN,NEW,NESOI	0	(34,863)	0	97,000	3,631,983	999,000	1,139,000
8459100000	WAY-TYPE UNIT HEAD MACHINES	223,411	420,550	861,990	0	0	66,808	147,743
8459210080	DRILLING MACH, METAL, N/C, NEW	2,950,740	1,610,742	2,217,940	1,170,583	3,170,871	1,625,490	751,187
8459310010	BOR-MIL MAC,HORIZ SPIN, TABLE TYP,MTL REMOV,N/C,NEW			0	368,800	3,705,000	0	
8459310040	BOR-MIL MAC,HORIZ SPN,EX TBL TYP,MTL REMOV,N/C,NEW			0	0	0	0	(798,490)
8459310070	BOR-MIL MAC,EXC HORIZ SPIN,MTL REMOV,N/C,NEW,NESOI			0	70,000	(34,560)	(111,673)	12,634
8459400040	BORING MAC,VERT,MTL REMOV,N/C,OVER \$3025,NEW	685,704	2,261,676	0	1,419,800	56,610	2,616,441	6,031
8459400070	BORING MACH,EX VERT,MTL REMOV, N/C,OVER \$3025 NEW			0	0	0	0	0
8459510080	MILLING MACHINES, KNEE TYPE, METAL REMOV, N/C, NEW	(22,375)	(13,126)	0	0	105,709	0	19,853
8459610080	MILLING MACH, EXC KNEE TYP, MTL REMOV, N/C, NEW	(176,796)	3,817,125	1,035,526	5,488,542	4,429,978	7,861,914	3,272,420
8459700020	THREADING OR TAPPING MACHINES, METAL REMOVING, N/C			570,903	10,000	0	0	224,000
8460110080	FLAT SURFACE GRINDING MACHINES, METAL REMOVING, AC	(10,393)	0	91,500	241,894	(273,983)	0	(9,205)
8460210080	GRINDING MACHINES EXCEPT FLAT SURFACE, METAL REMOV	0	2,052,312	538,436	754,190	1,175,982	2,793,095	1,828,959
8460310080	SHARPENING (TOOL OR CUTTER GRINDING) MACHINES, MET	2,670	(104,379)	17,361	(39,750)	0	212,710	564,812
8460400060	HONING OR LAPPING MACHINES, METAL REMOVING, NUMERI	1,300,000	1,918,942	5,440	1,950,139	5,874,991	1,368,555	2,624,074
8460404060	HONING OR LAPPING MACHINES, METAL REMOVING, NUMERI	(4,172)	(3,000)	0	(2,890)	0	(91,729)	(66,000)
8460900060	MAC TOOLS USING ABRASIVES,NESOI,N/C,OV \$3025, NEW			67,331	21,362	1,211,351	11,926	357,024
8460904060	MAC TOOLS USING ABRASIVES,NESOI,N/C,3,025OVER, NEW	0	(4,989)	0	(18,960)	(445,460)	(155,800)	(233,693)

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HS Code	Commodity Description	2000	2001	2002	2003	2004	2005	2006
8461200010	SHAPING OR SLOTTING MACHINES, METAL REMOVING, N/C			0	1,401,000	0	833,878	154,800
8461204000	SHAPING OR SLOTTING MACHINES, METAL REMOVING, N/C					(12,097)		
8461300060	BROACHING MACH, METAL REMOV, N/C, OVER \$3025, NEW			0	212,500	0	840,000	1,866,285
8461304060	BROACHING MACH, METAL REMOV, N/C, NEW						0	(3,100)
8461500050	SAWING OR CUTTING-OFF MACHINES, METAL REMOVING, NU	0	12,000	207,299	104,002	0	142,075	48,295
8461504050	SAWING OR CUTTING-OFF MACHINES, METAL REMOVING, NU	(68,014)	(63,732)	(47,281)	0	(21,337)	(46,810)	(723,672)
8461900040	MACHINE TOOLS WORKING BY REMOVING METAL, NESOI, NU	0	19,808					
8461903040	PLANING MAC,METAL REMOV,NUM CTRL,OVR \$3025,NEW			68,309	0	0	10,000	0
8461903080	MAC TOOLS, MTL REMOV,NUM CTRL,OV\$3025,NEW,NESOI			1,088,192	142,110	350,700	379,308	822,452
8462210080	BENDING, FOLDING, STRAIGHTENING OR FLATTENING MACH	1,366,249	2,830,381	338,178	4,107,369	2,184,434	5,680,769	12,034,745
8462214085	NUMERIC CONTROL MACH FR BEND SEMICONDC LEAD,NESOI						0	(47,745)
8462218085	BENDING, FOLDING, OR FLATTENING MACHINES (INCLUDI	(368,473)	(235,400)	(415,571)	(557,165)	(489,185)	(772,653)	(621,993)
8462310080	SHEARING MACHINES (INC PRESSES), OTHER THAN COMBIN	0	(55,749)	(14,760)	(69,521)	(268,192)	(24,150)	(3,480,458)
8462410080	PUNCHING OR NOTCHING MACHINES (INC PRESSES), INCLU	746,000	2,200,234	3,136,189	(31,757)	5,014,850	4,832,240	5,078,780
8462910060	HYDRAULIC PRESSES, METAL FORMING, NUMERICALLY CONT	0	684,506	0	367,253	391,924	215,829	4,611,774
8462914060	HYDRAULIC PRESSES, METAL FORMING, NUMERICALLY CONT	(346,401)	(158,169)	(56,661)	(249,193)	0	(15,750)	(416,843)
8462990030	MACHINE TOOLS (INCLUDING PRESSES) WORKING BY FORMI	361,528	56,830	0	236,584	15,629	133,738	1,471,981
8464100040	SAW MACH DESIGND TO SAW BLANK SEMICONDUCTOR WAFERS	1,112,025	3,637,036	200,130		119,810	(40,899)	171,120
8464201000	GRIND/POLISH MACH FR PROCESSING SEMICONDUCTOR WAFER						0	(69,665)
8464901040	MACH TOOLS FR SCRIBING/SCORING SEMICONDUCTOR WAFER	607,385	0	735,075	798,117	675,121	1,156,646	662,563
8464901060	MACH TLS FR SCRIBING/SCORING SEMICONDUCTOR WAFERS	12,946,369	14,325,072	11,709,101	831,821	5,017,654	(548,000)	60,000
8464906000	MACHINE TOOLS FOR WET DEVELOPING OR STRIPPING			595,807	1,639,690	1,241,600	727,631	2,582,302
8465100025	WOODWORKING TENONERS,NUMERICALLY CONTROLLED,NEW						0	(93,520)
8465920055	ROUTERS, NEW, NUMERICALLY, WOODWORKING MACHINES						0	(1,869,631)
8465950020	BORING MACHINES, N/C, WOODWORKING, NEW						0	(80,210)
8470500020	POINT-OF-SALE TERMINAL TYPE CASH REGISTERS		(108,964,709)	(140,000,000)	(140,000,000)	(73,446,941)	(73,744,380)	(189,116,163)
8471100000	ANALOG OR HYBRID AUTOMATIC DATA PROCESSING MACHINE	15,984,331	23,342,854	7,892,163	8,361,304	(1,577,009)	12,337,766	3,050,642
8471300000	PORTABLE DIGITAL ADP MACHINE, WEIGHING NOT MORE TH	2,974,867	(11,606,327)	(620,000,000)	(4,100,000,000)	(7,664,383,464)	(10,615,671,626)	(12,759,760,090)
8471410035	DIGITAL ADP MACH CONTAINING IN SAME HOUSING AT LEA	10,892,432	7,701,390	8,162,928	(5,040,697)	(6,115,725)	(10,770,579)	5,464,366
8471410065	DIGITAL ADP MACH CONTAINING IN SAME HOUSING AT LEA	4,840,800	3,528,920	2,921,154	2,230,832	2,902,746	3,572,662	3,547,530
8471410095	DIGITAL ADP MACH CONTAINING IN SAME HOUSING AT LEA	18,993,196	13,143,814	(41,000,000)	(220,000,000)	(332,986,467)	(186,754,924)	(344,402,104)
8471491035	DIGITAL PROCESSING UNIT WHICH MAY CONTAIN IN SAME	(199,040,989)	(63,105,855)	52,054,966	46,016,489	75,701,488	(188,344,229)	112,939,401
8471491065	DIGITAL PROCESSING UNIT WHICH MAY CONTAIN IN SAME	556,705	2,033,537	515,370	431,431	550,319	222,256	826,176
8471491095	DIGITAL PROCESSING UNIT WHICH MAY CONTAIN IN SAME	1,462,372	12,059,646	(15,000,000)	(110,000,000)	(464,566,745)	(1,247,578,905)	(1,697,452,381)
8471491500	COMBINATION INPUT/OUTPUT UNITS WITHOUT A CRT,WHETH	667,092	1,529,029	325,286	510,417	2,935,466	8,273,966	8,366,329
8471492400	DISPLAY UNITS, NOT INCORPORATING A CRT, HAVING A V	408,519	2,275,848	3,952,569	211,578	(231,099,643)	(394,616,760)	(513,931,643)
8471492600	COLOR CATHODE-RAY TUBE (CRT) MONITORS, ENTERED WIT	4,249,121	328,159	142,695	1,180,334	683,609	(4,821,465)	(903,923)
8471492900	DISPLAY UNITS, NESOI, NOT INCORPORATING A CRT, ENT	(471,679)	(288,584)	1,511,768	(1,365,446)	(11,781,732)	(23,354,810)	(55,068,471)
8471494200	OPTICAL SCANNERS AND MAGNETIC INK RECOGNITION DEVI	(3,692,201)	(5,669,356)	(2,321,810)	(2,561,036)	(6,652,363)	(9,596,667)	(14,838,363)
8471494850	CARD KEY AND MAGNETIC MEDIA ENTRY DEVICES, ENTERED	110,123	(136,043)	(490,332)	(498,029)	(936,607)	(622,453)	(194,480)
8471494875	ADP OUTPUT DEVICES, NESOI, ENTERED IN THE FOR OF S	364,905	648,624	181,206	38,408	(417,944)	(13,555,228)	(60,635,339)
8471494895	ADP INPUT UNITS, NESOI, ENTERED IN THE FORM OF SYS	(94,354)	1,348,930	(869,757)	(5,767,381)	(9,186,755)	(11,337,880)	(15,406,508)
8471495010	MAGNETIC DISK DRIVE UNITS WITH A DISK DIAMETER GT=	157,862	66,912	(141)	6,502	(79,730)	40,309	11,113
8471495020	FLEXIBLE (FLOPPY) MAGNETIC DISK DRIVE UNITS, NESOI	(183,200)	(1,322,776)	(1,207,700)	(569,543)	(140,877)	150,760	334,812
8471495040	HARD MAGNETIC DISK DRIVE UNITS, NESOI, ENTERED WIT	242,683	3,231,982	1,867,571	461,725	(1,542,001)	(30,781,578)	1,391,854
8471495060	DISK DRIVE UNITS, NESOI, ENTERED WITH THE REST OF	2,244,115	2,995,797	1,545,552	170,172	(3,049,981)	(13,170,142)	(4,013,577)
8471495080	OTHER STORAGE UNITS, NESOI, ENTERED WITH THE REST	(325,852)	44,492	550,176	333,226	69,351	3,731,178	6,571,443
8471496000	CONTROL OR ADAPTER UNITS FOR AUTOMATIC DATA PROCES	(6,939)	993,740	322,200	(2,140,792)	(7,529,086)	(31,626,489)	(13,865,674)
8471498500	UNITS, NESOI, SUITABLE FOR PHYSICAL INCORPORATION	(1,430,171)	(1,757,007)	(685,187)	(515,170)	(500,401)	(272,336)	(2,660,034)
8471499000	AUTOMATIC DATA PROCESSING UNITS,NESOI, ENTERED WIT	3,212,358	968,745	3,971,990	17,896,422	9,442,761	17,452,566	15,300,473
8471499500	UNITS, NESOI, FOR AUTOMATIC DATA PROCESSING MACHIN	(1,260,729)	(59,225)	(549,216)	(283,860)	(3,626,503)	(1,468,510)	(1,366,748)
8471500035	DIGITAL PROCESSING UNIT WHICH MAY CONTAIN IN SAME	2,191,831	1,196,226	1,023,163	(490,564)	145,365	226,097	1,222,664
8471500065	DIGITAL PROCESSING UNIT WHICH MAY CONTAIN IN SAME	147,657	348,035	1,393,300	418,732	37,957	404,689	145,964
8471500085	DIGITAL PROCESSING UNITS EXCLUDE SUBHEADING 8471.4	(651,437,100)	(172,482,794)	(390,000,000)	(890,000,000)	(1,019,895,197)	(1,483,666,202)	(1,878,174,214)
8471601035	COMBINATION INPUT/OUTPUT UNITS WITH COLOR CATHODE	(1,632,960)	672,645	(589,362)	(78,261)	54,573	(13,083)	(10,030)
8471601065	COMBINATION INPUT/OUTPUT UNITS WITH A MONOCHROME C	(3,246,489)	(292,584)	0	(3,655)	(19,624)	(134,511)	106,451
8471601095	COMBINATION INPUT/OUTPUT UNITS WITHOUT A CRT,WHETH	(24,955,939)	(14,420,390)	(30,000,000)	(49,000,000)	(15,673,400)	(29,419,282)	(31,063,277)
8471603000	DISPLAY UNITS, NOT INCORPORATING A CRT, HAVING A V	(8,448,883)	(12,525,823)	(46,000,000)	(170,000,000)	(142,842,714)	(66,583,149)	(33,061,887)
8471604580	DISPLAY UNITS, NESOI, NOT INCORPORATING A CRT	(96,342,517)	(223,716,078)	(1,300,000,000)	(2,900,000,000)	(4,870,000,000)	(5,265,914,779)	(5,220,839,433)
8471605100	LASER PRINTER UNITS INCORPORATING AT LEAST THE MED	(152,317,295)	(353,785,648)	(440,000,000)	(130,000,000)	(276,000,000)	(569,872,312)	(865,327,143)
8471605200	LASER PRINTER UNITS INCORPORATING AT LEAST THE MED	(198,961,951)	(163,329,064)	(190,000,000)	(99,000,000)	(110,000,000)	(152,229,770)	(114,540,347)
8471607040	OUTPUT DEVICES, NESOI, SUITABLE FOR INCORPORATION	1,931,341	1,542,198	432,408	(1,262,099)	(7,256,431)	(1,341,275)	132,828
8471607080	INPUT UNITS, NESOI, SUITABLE FOR PHYSICAL INCORPOR	1,768,813	(4,120,196)	(8,540,310)	(8,952,904)	(7,707,624)	(9,715,532)	(8,215,961)
8471608000	OPTICAL SCANNERS AND MAGNETIC INK RECOGNITION DEVI	(353,482,889)	(286,267,653)	(290,000,000)	(140,000,000)	(141,438,069)	(126,345,486)	(140,992,373)
8471609030	CARD KEY AND MAGNETIC MEDIA ENTRY DEVICES	(947,831)	(4,868,497)	(2,324,518)	(2,527,254)	(1,477,486)	(2,212,810)	(4,521,048)
8471609070	ADP OUTPUT DEVICES, NESOI	(974,377)	(2,439,704)	(2,581,506)	(363,282)	(611,921)	379,299	(692,046)
8471609090	ADP INPUT UNITS, NESOI	(283,833,844)	(251,609,530)	(280,000,000)	(300,000,000)	(300,637,247)	(342,915,417)	(385,901,804)
8471701000	MAGNETIC DISK DRIVE UNITS WITH A DISK DIAMETER GT=	(868,447)	(570,598)	41,259	(3,203,441)	(1,792,692)	(962,841)	(16,859,973)
8471702000	MAGNETIC DISK DRIVE UNITS FOR AUTOMATIC DATA PROC	(721,434)	(916,854)	(816,976)	4,915,908	1,090,502	(898,514)	565,274
8471703000	MAGNETIC DISK DRIVE UNITS, NESOI, WITH A DISK DIAM	386,879	988,184	(99,810)	(2,975,751)	(660,691)	(30,770)	856,284
8471704035	FLEXIBLE (FLOPPY) MAGNETIC DISK DRIVE UNITS, NESOI	(104,517,247)	(84,891,093)	(110,000,000)	(81,000,000)	(68,794,996)	(45,629,343)	(37,700,197)
8471704065	HARD MAGNETIC DISK DRIVE UNITS, NESOI, NOT ASSEMBL	(262,527,389)	(285,275,608)	(290,000,000)	(400,000,000)	(582,670,661)	(985,673,425)	(1,197,641,314)
8471704095	DISK DRIVE UNITS, NESOI, NOT ASSEMBLED IN CABINETS	(1,542,414)	(7,729,731)	(16,000,000)	(28,000,000)	(11,901,060)	(10,103,288)	(140,575)
8471705035	FLEXIBLE (FLOPPY) MAGNETIC DISK DRIVE UNITS, NESOI	(3,831,440)	(7,037,507)	(16,000,000)	(21,000,000)	(34,436,226)	(29,630,139)	(14,519,317)
8471705065	HARD MAGNETIC DISK DRIVE UNITS, NESOI	18,913,422	10,433,803	4,191,972	(17,000,000)	(48,211,262)	(57,563,729)	(90,743,288)
8471705095	DISK DRIVE UNITS, NESOI	(14,553,347)	(3,903,299)	(1,842,818)	(4,065,264)	(6,094,631)	1,991,658	(859,551)
8471706000	OTHER STORAGE UNITS, NESOI, NOT ASSEMBLED IN CABIN	(761,389,008)	(830,245,305)	(1,100,000,000)	(1,000,000,000)	(1,209,590,409)	(1,055,533,244)	(1,358,862,292)
8471709000	OTHER STORAGE UNITS, NESOI	(2,754,042)	(47,614,625)	(82,000,000)	(61,000,000)	(83,810,441)	(139,076,339)	(130,034,333)
8471801000	CONTROL OR ADAPTER UNITS FOR AUTOMATIC DATA PROCES	209,977,032	149,173,924	(220,000,000)	(440,000,000)	(1,025,000,000)	(1,418,964,566)	(1,455,272,199)
8471804000	UNITS, NESOI, SUITABLE FOR PHYSICAL INCORPORATION	3,447,801	18,105,441	82,434,574	126,000,000	1,030,018,735	40,015,497	75,496,484
8471809000	OTHER UNITS FOR AUTOMATIC DATA PROCESSING MACHINES	(9,305,746)	(2,555,212)	(22,000,000)	(28,000,000)	(47,026,787)	(96,628,335)	(228,061,544)
8471900000	MACHINES AND UNITS THEREOF FOR PROCESSING DATA, NE	(81,608)	12,194,538	(1,344,837)	(12,000,000)	(26,163,674)	(161,029,641)	(142,709,320)
8473300000	PARTS AND ACCESSORIES FOR AUTOMATIC DATA PROCESSIN	527,528,182	611,654,049	413,000,000	497,000,000	564,000,000	977,250,613	1,249,668,730
8473301000	PARTS AND ACCESSORIES OF AUTOMATIC DATA PROCESSING	(1,727,113,524)	0	0	0	0	0	0
8473301040	PARTS AND ACCESSORIES OF AUTOMATIC DATA PROCESSING	0	(245,646,418)	(280,000,000)	(510,000,000)	(787,000,000)	(969,536,628)	(1,775,693,889)
8473301080	PARTS AND ACCESSORIES OF AUTOMATIC DATA PROCESSING	0	(1,529,492,315)	(2,100,000,000)	(2,400,000,000)	(2,960,000,000)	(3,034,010,636)	(3,729,743,524)
8473302000	PARTS AND ACCESSORIES, INCLUDING FACE PLATES AND L	(11,193,480)	(77,202,172)	(55,000,000)	(72,000,000)	(51,307,494		

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HS Code	Commodity Description	2000	2001	2002	2003	2004	2005	2006
8479500000	INDUSTRIAL ROBOTS, NESOI	753,317	7,333,492	2,382,542	2,566,982	3,284,632	11,485,435	4,952,187
8479898472	APPARATUS FOR GROWING SEMICONDUCTOR CRYSTALS			0	1,203,591	590,835		0
8479898474	MACHINE TO COAT SEMICONDUCTOR WAFERS WITH EMULSION			1,901,990	3,446,600	4,056,337	923,730	846,085
8479898476	CHEMICAL VAPOR DEPOSITION APPARATUS			121,000,000	107,000,000	321,000,000	69,947,173	180,535,297
8479898490	MACH NESOI FOR PROD & ASSEMBLY OF SEMICONDUCTORS			67,497,627	52,122,622	63,457,967	68,503,733	76,923,908
8479898572	APPARATUS DESIGNED TO GROW MONOCRYSTAL SEMICONDUCTOR	0	72,135					
8479898574	MACHINES (SPINNERS) DESIGNED TO COAT PHOTOGRAPHIC	735,672	689,329					
8479898576	CHEMICAL VAPOR DEPOSITION (CVD) APPARATUS INCLUDIN	48,032,332	60,963,233					
8479898578	PHYSICAL DEPOSITION APPARATUS INCLUDING SPUTTERING	25,002,469	50,986,163					
8479898590	MACHINES FOR PRODUCTION & ASSEMBY OF DIODES, TRANS	21,592,346	27,581,089					
8479909440	PARTS OF INDUSTRIAL ROBOTS, NESOI			6,918,536	4,693,494	2,844,887	5,948,629	6,010,166
8479909540	PARTS OF INDUSTRIAL ROBOTS	2,763,722	8,054,485					
8504902000	PARTS OF POWER SUPPLIES FOR AUTOMATIC DATA PROCESS	(3,544,751)	(1,627,089)	(2,546,518)	(2,485,340)	(1,684,032)	(5,352,298)	(7,691,017)
8504904000	OTHER PARTS AND ACCESSORIES OF POWER SUPPLIES FOR	(8,623,244)	(10,840,027)	(15,000,000)	(19,000,000)	(29,357,457)	(29,391,359)	(29,974,871)
8514302000	FURNACES AND OVENS FOR DIFFUSION, OXIDATION OR ANN	3,395,385	5,533,857	3,379,843	2,566,888	7,506,013	11,341,498	1,551,279
8515210000	MACHINES AND APPARATUS FOR RESISTANCE WELDING OF M	1,496,437	715,677	1,213,550	1,358,675	6,324,541	1,145,374	2,372,609
8515310000	MACHINES AND APPARATUS FOR ARC (INCLUDING PLASMA A	3,391,473	7,788,576	10,505,596	9,886,916	11,427,275	10,051,428	9,609,879
8517190000	VIDEOPHONES	2,184,498	4,227,906	2,675,413	1,565,230	3,457,683	6,445,101	8,389,658
8517194000	VIDEOPHONES	(36,545)	0	(3,963,026)	(807,837)	(3,352,841)	(4,232,690)	(3,019,840)
8517210000	FACSIMILE MACHINES	(74,079,955)	(122,868,869)	(150,000,000)	(160,000,000)	(174,000,000)	(143,588,886)	(140,587,276)
8517301500	CENTRAL OFFICE SWITCHING APPARATUS	2,870,172	33,011,002	7,488,146	4,494,134	5,575,701	4,328,748	(814,034)
8517302000	PRIVATE BRANCH EXCHANGE SWITCHING APPARATUS	1,619,403	739,324	349,100	360,183	637,295	(404,805)	(572,593)
8517302500	ELECTRONIC KEY TELEPHONE SYSTEMS	(249,657)	(2,532,938)	(4,087,165)	(2,849,494)	(5,029,504)	(2,354,269)	(2,389,448)
8517303000	TELEPHONIC SWITCHING APPARATUS,NESOI	3,029,696	2,034,873	1,767,128	8,755,581	2,998,062	677,023	1,127,239
8517305000	TELEGRAPHIC SWITCHING APPARATUS	3,975,726	11,418,443	8,331,125	(29,000,000)	(51,886,159)	(207,338,154)	(135,563,706)
8517501000	MODEMS (MODULATOR-DEMULATOR APPARATUS) OF A KIND	(147,189,163)	(173,136,764)	(190,000,000)	(160,000,000)	(373,405,346)	(417,086,195)	(463,052,589)
8517505000	CARRIER-CURRENT LINE SYSTEM APPARATUS, TELEPHONIC	23,805,594	18,297,311	(12,000,000)	(11,000,000)	(53,576,072)	(319,237,503)	(302,235,723)
8517506000	OTHER APPARATUS, TELEGRAPHIC, FOR CARRIER-CURRENT	(1,342,165)	(1,098,126)	(8,146,998)	(17,000,000)	(1,910,735)	(7,968,889)	(61,289,841)
8517509000	OTHER APPARATUS, TELEGRAPHIC, FOR DIGITAL LINE SYS	(18,897,510)	96,248,919	30,000,849	(88,000,000)	(321,000,000)	(620,290,824)	(1,262,496,593)
8517900400	PARTS OF FACSIMILE MACHINES SPECIFIED IN ADDITIONA	(26,975,661)	(24,322,674)	(31,000,000)	(32,000,000)	(33,914,072)	(24,215,268)	(21,544,302)
8517900800	PARTS OF FACSIMILE MACHINES, NESOI	(14,557,803)	(14,016,752)	(12,000,000)	(9,315,921)	(20,545,925)	(38,649,193)	(36,935,316)
8517902000	PARTS FOR TELEPHONIC SWITCHING APPARATUS	51,760,184	54,983,943	89,186,196	23,323,734	17,090,822	19,517,966	38,271,124
8517902400	PARTS FOR TELEPHONIC SWITCHING OR TERMINAL APPARAT	(10,062,590)	(17,077,333)	(5,957,867)	(7,440,906)	(7,282,753)	(15,394,299)	(19,667,205)
8517902600	PARTS OF TELEGRAPHIC SWITCHING APPARATUS INCORPORA	(317,283)	(86,136)	(194,150)	(301,066)	(523,701)	(501,624)	(748,066)
8517903200	PARTS OF ARTICLES OF SUBHEADING 8517.20, 8517.30,	(2,387,591)	(3,395,456)	(3,121,513)	(2,271,811)	(3,364,043)	(5,075,900)	(5,594,086)
8517903400	PARTS OF TELEPHONIC AND TELEGRAPHIC SWITCHING APP	(11,937,208)	(1,539,879)	(6,634,979)	(9,508,537)	(6,240,753)	(5,279,334)	(12,833,897)
8517903600	PRINTED CIRCUIT ASSEMBLIES FOR TELEPHONIC SWITCHIN	(88,772,586)	(75,532,931)	(64,000,000)	(38,000,000)	(60,288,980)	(90,958,195)	(110,747,584)
8517903800	PRINTED CIRCUIT ASSEMBLIES FOR TELEPHONIC APPARATU	(102,495,746)	(62,120,304)	(41,000,000)	(28,000,000)	(35,324,835)	(60,851,062)	(42,186,882)
8517904400	PRINTED CIRCUIT ASSEMBLIES FOR TELEGRAPHIC APPARAT	(5,488,953)	(6,291,465)	(12,000,000)	(130,000,000)	(341,000,000)	(316,953,489)	(320,534,187)
8517905000	PARTS,NESOI,FOR TELEPHONIC APPARATUS	250,796,851	84,827,706	28,503,846	23,803,126	23,291,985	52,222,054	68,768,319
8517905200	PARTS, INCLUDING FACE PLATES AND LOCK LATCHES, FOR	(2,493,918)	(918,554)	(2,109,024)	(4,306,769)	(3,072,826)	(3,270,747)	(4,556,899)
8517905800	PARTS FOR TELEPHONIC APPARATUS FOR SWITCHING OR TE	(2,363,114)	(1,449,602)	(3,235,106)	(2,968,146)	(3,753,447)	(2,602,659)	(6,492,110)
8517906400	PARTS OF TELEPHONIC APPARATUS, NESOI	(40,567,646)	(41,007,430)	(34,000,000)	(37,000,000)	(42,314,534)	(44,328,746)	(75,536,005)
8517909000	PARTS FOR TELEGRAPHIC APPARATUS	11,653,820	73,039,982	169,000,000	179,000,000	261,000,000	206,479,534	290,098,871
8519990045	OPTICAL DISC (INCLUDING COMPACT DISC) PLAYERS	(657,676,103)	(697,224,898)	(850,000,000)	(624,890,000)	(700,000,000)	(532,423,107)	(355,984,277)
8521100000	VIDEO RECORDING OR REPRODUCING APPARATUS, WHETHER	2,965,789	4,168,651	713,558	1,323,000	1,107,368		
8521106000	VIDEO CASSETTE OR CARTRIDGE RECORDING AND REPRODUC	(466,652,987)	(392,077,753)	(340,000,000)	(200,000,000)	(116,000,000)		
8521109000	VIDEO RECORDING OR REPRODUCING APPARATUS, MAGNETIC	(2,016,737)	(1,109,502)	(177,335)	(4,368,380)	(963,126)		
8521900000	VIDEO RECORDING OR REPRODUCING APPARATUS EXCEPT MA	(605,360,210)	(1,250,866,994)	(2,100,000,000)	(2,400,000,000)	(2,926,000,000)	(2,814,099,801)	(3,366,493,392)
8524310000	DISCS FOR LASER READING SYSTEMS, FOR REPRODUCING P	19,636,736	21,324,078					
8524310030	DISCS FOR LASER READING SYSTEMS FOR REPRODUCING PH	(1,183,740)	(5,971,095)	(1,778,785)	(1,366,987)	24,015,977	21,028,636	29,247,658
8524310070	LASER DISCS,NOT FOR REPRODUCING SOUND/IMAGE, NESOI			19,133,736	24,626,426	5,632,382	10,839,475	18,298,789
8524390000	DISCS FOR LASER READING SYSTEMS, NESOI	9,446,792	13,585,859					
8524394000	DISCS FOR REPRODUCING REPRESENTATIONS OF INSTRUCTI	(19,459,335)	(24,567,826)	(12,000,000)	(40,000,000)	(57,712,571)	(78,653,641)	(60,508,396)
8524398000	DISCS FOR LASER READING SYSTEMS, NESOI	(1,182,616)	(3,856,731)	436,932	3,591,352	11,117,953	9,010,191	7,159,839
8524400000	MAGNETIC TAPE RECORDINGS FOR REPRODUCING PHENOMENA	1,005,041	1,659,041	815,670	1,037,464	2,471,748	4,377,467	814,878
8524910000	OTHER RECORDED MEDIA, NESOI, FOR REPRODUCING PHENO	14,748,789	7,243,936					
8524910030	PREPACKAGED SOFTWARE FOR ADP MACHINES, OF A KIND S	(806,912)	(444,254)	(643,541)	(2,340,286)	4,686,486	10,845,090	22,188,646
8524910070	OTHER MAGNETIC MEDIA, FOR REPRODUCING PHENOMENA OT	(1,086,359)	(1,065,963)	7,180,354	17,679,261	10,264,057	4,965,155	4,367,539
8524990000	RECORDED MEDIA, NESOI	11,065,237	14,568,993	18,025,073	19,191,937	15,059,812	33,188,172	23,780,726
8524994000	RECORDED MEDIA FOR SOUND OR OTHER SIMILARLY RECOR	(6,672,345)	(5,416,863)	(9,805,392)	(6,548,021)	(9,423,668)	(20,009,026)	(12,825,402)
8525106070	RADIO TRANSMITTERS,NESOI, CAPABLE OF TRANSMITTING	4,592,644	2,295,711	2,614,663	2,179,280	4,053,076	2,023,900	1,523,935
8525106090	RADIO TRANSMITTERS,NESOI, CAPABLE OF TRANSMITTING	611,871	2,247,527	2,602,437	2,534,190	3,856,524	4,299,058	5,690,869
8525107065	TRANSMITTERS CAPABLE OF TRANSMITTING ON FREQUENCY	(216,548)	(33,397)	(22,892)	(10,160)	(234,464)	(160,571)	(410,358)
8525107085	TRANSMIT FR FREQUENCY GT 1000 MHZ,RADIOBROADCAST			(68,727)	(294,946)	0	(259,443)	(525,318)
8525107090	TRANSMISSION APPARATUS FOR RADIOBROADCASTING, NESO	0	(19,409)	(1,279,297)	(871,111)	(422,416)	(369,228)	(1,112,702)
8525108020	TRANSMISSION APPARATUS,NESOI,FOR CIVIL AIRCRAFT	303,943	1,093,691	1,022,052	636,082	2,408,683	3,052,273	2,050,040
8525108040	TRANSMISSION APPARATUS,NESOI,FOR RADIOTELEPHONY,RAD	4,398,855	3,633,603	3,970,246	3,803,463	6,145,111	2,683,229	3,933,453
8525109025	TRANSMITTERS CAPABLE OF TRANSMITTING ON FREQUENCY	(1,378,786)	(439,441)	(201,983)	(724,064)	(481,074)	(390,464)	(305,509)
8525109065	TRANSMITTERS CAPABLE OF TRANSMITTING ON FREQUENCY	(49,882)	(2,041,041)	(4,909,093)	(4,946,738)	(6,458,282)	(4,667,349)	(7,038,711)
8525109085	TRANSMITTERS CAPABLE OF TRANSMITTING ON FREQUENCY	(1,480,904)	(3,428,042)	(1,123,217)	(428,825)	(787,900)	(33,889,170)	(9,464,152)
8525109090	TRANSMISSION APPARATUS FOR RADIOTELEPHONY OR RADIO	(577,101)	(9,809,541)	(10,000,000)	(30,000,000)	(56,388,237)	(132,056,335)	(114,929,443)
8525203025	RADIO TRANSCEIVERS, HAND-HELD, FOR FREQUENCIES EXC	(147,737,524)	(175,857,655)	(350,000,000)	(740,000,000)	(876,000,000)	(153,456,058)	(131,730,014)
8525203055	RADIO TRANSCEIVERS, NESOI, FOR FREQUENCIES EXCEEDI	79,153,282	129,862,830	58,987,825	24,746,627	11,351,069	23,608,534	9,768,877
8525203080	RADIO TRANSCEIVERS,EXCEPT HANDHELD, FOR FREQUENCY	(16,312,057)	(5,407,611)	(6,543,552)	(13,000,000)	(23,515,215)	(14,742,564)	(29,380,030)
8525209020	RADIO TELEPHONES DESIGNED FOR INSTALLATION IN MOTO	1,184,833	1,109,657	2,255,251	4,120,359	1,763,128	422,568	(4,736,690)
8525209040	RADIO TELEPHONES DESIGNED FOR THE PUBLIC CELLULAR	1,850,138	1,407,438	1,460,774	1,062,045	1,664,504	110,465,366	57,544,522
8525209060	RADIO TELEPHONES DESIGNED FOR THE PUBLIC CELLULAR	(52,744)	(20,940)	(1,523,260)	(427,262)	(828,233)	(3,602,967)	(2,579,811)
8525209070	RADIO TELEPHONES DESIGNED FOR THE PUBLIC CELLULAR	(280,772,544)	(614,093,134)	(1,400,000,000)	(2,000,000,000)	(4,310,000,000)	(8,457,345,725)	(10,899,631,782)
8525209080	RADIO AND TELEVISION TRANSMISSION APPARATUS, NESOI	35,724,317	91,735,542	(80,000,000)	(69,000,000)	(194,438,643)	(565,655,267)	(693,394,447)
8525300020	TELEVISION CAMERAS, COLOR	225,950	1,194,414	840,042	1,374,554	3,209,579	5,072,051	3,217,882
8525300070	TELEVISION CAMERAS, EXCEPT COLOR	69,552	149,474	2,800	232,872	126,412	1,855,273	2,520,618
8525303000	GYROSTABILIZED TELEVISION CAMERAS					(90,931)	(12,410)	(248,829)
8525306000	STUDIO TV CAMERAS, EXC SHOLDER-CARRIED & PORTABLE			(18,523)	(3,224)	(5,899)	(95,213)	(103,916)
8525309005	TELEVISION CAMERAS, NESOI, COLOR	(87,983,755)	(66,293,237)	(51,000,000)	(56,000,000)	(88,013,264)	(130,090,111)	(184,088,218)
8525309060	TELEVISION CAMERAS, EXCEPT COLOR	(12,856,268)	(10,226,092)	(6,346,583)	(16,000,000)	(12,223,904)	(13,477,518)	(18,432,649)
8525404000	DIGITAL STILL IMAGE VIDEO CAMERAS	(174,453,336)	(175,225,011)	(6				

US Balances in Advanced Technology Products Trade With China

HS Code	Commodity Descriptor	2000	2001	2002	2003	2004	2005	2006
8526910030	RADIO NAVIGATIONAL AID APPARATUS, RECEPTION ONLY T	45,430	1,155,921	1,501,435	4,758,273	8,063,375	15,174,476	11,781,292
8526910040	RADIO NAVIGATIONAL AID APPARATUS, NESOI	(119,849)	(365,245)	(2,323,571)	(22,000,000)	(27,615,491)	(71,883,128)	(183,252,883)
8526910070	RADIO NAVIGATIONAL AID APPARATUS, NESOI	1,666,599	3,271,355	4,029,106	7,131,851	9,471,830	5,368,446	4,669,937
8526920000	RADIO REMOTE CONTROL APPARATUS	(20,986,449)	(16,430,171)	(20,000,000)	(28,000,000)	(32,000,927)	(30,416,811)	(35,709,431)
8527905000	INFANT NURSERY MONITOR SYSTEMS, PACKAGE CONSISTING	(30,645,464)	(27,834,800)	(27,000,000)	(31,000,000)	(31,407,902)	(27,125,345)	(31,908,180)
8527908045	RADIO RECEIVERS, NESOI, CAPABLE OF RECEIVING SIGNALS	3,551,710	66,869					
8527908055	RADIO RECEIVERS, NESOI, CAPABLE OF RECEIVING SIGNALS	695,644	240,682					
8527908075	RECEPTION APPARATUS FOR RADIOTELEPHONY, RADIOTELEGR	5,514,171	5,124,882					
8527909550	RADIO RECEIVERS CAPABLE OF RECEIVING SIGNALS ON FR	(78,944)	(756,560)	(869,628)	(547,310)	(886,281)	(750,931)	(599,955)
8527909560	RADIO RECEIVERS CAPABLE OF RECEIVING SIGNALS ON FR	0	(2,184)	(6,890)	0	0	(9,583)	(11,272)
8527909590	RECEPTION APPARATUS FOR RADIOBROADCASTING OR RADIO	(5,383,267)	(9,195,446)	(1,445,932)	(1,084,596)	(1,804,300)	(2,440,790)	(6,482,416)
8527909745	RADIO RECEIVERS (400 - 1000 MHZ)			0	11,880	15,268	17,272	84,487
8527909755	RADIO RECEIVERS GT 1000 MHZ			286,625	545,700	1,810,043	1,917,907	398,781
8527909775	RECEPTION APPARATUS RADIO COMMUNICATIONS, NESOI			613,687	2,466,832	631,549	501,328	623,192
8528120400	TV RECEIVERS INCOMPLETE OR UNFINISHED ASSEMB, COLO	(8,534)	(52,828)	(246,797)	(188,176)	(961,083)	(938,824)	(698,064)
8528121201	TV RECEIVERS, NON-HIGH DEFINITION, COLOR, SINGLE P	(36,853,644)	(10,348,618)	(1,911,088)	(21,000,000)	(29,730,308)	(26,704,673)	(42,425,940)
8528121601	TV RECEIVERS, NON-HIGH DEFINITION, COLOR, SINGLE P	0	(5,365)	(5,615,328)	0	(568,552)	(1,863,885)	(4,743,391)
8528122800	RECEPTION APPAR FOR TV, NON-HI DEF, COLOR, SINGLE PIC	(15,549,578)	(5,563,379)	(822,976)	(18,000,000)	(173,000,000)	(57,286,328)	(63,484,958)
8528123000	RECEPTION APPARATUS FOR TV, COLOR, INCORPORATING V	1,109,265	595,294	293,119	758,815	3,140,058	3,981,614	7,295,371
8528123600	TV RECP, COL, NON-HD, PROJ, CATH-RAY, W/ VIDEO REC/REP					(20,039)	0	(1,438,371)
8528124000	RECEPTION APPA FOR TV, COLOR, NON-HIGH DEFINITION,	0	(16,597,170)	(11,000,000)	(6,911,936)	(117,055)	(2,600)	(2,810,638)
8528124400	TV REC, COL, HI-DEF, NON-PROJ, CATH-RAY TUBE W/REC REP			0	0	0	0	0
8528124800	RECEPTION APPARATUS FOR TV, COLOR, HIGH-DEFINITION	(4,000)	(5,847)	(6,662)	(10,000,000)	(2,528,376)	(6,838,759)	(6,577,905)
8528125200	TV RECP, COLOR, HD, PROJ, CATH-RAY, W/ VIDEO REC/REP					0	(76,338)	(147,600)
8528125600	RECEPTION APPARATUS FOR TV, COLOR, HIGH DEFINITION	(8,000)	(15,203)	(3,534)	(8,000)	(658,565)	0	(37,696)
8528126201	RECEPTION APPARATUS FOR TV, CLR, W/ A FLAT PANEL SC	0	(113,400)	(2,813,560)	(16,000,000)	(14,506,648)	(71,374,669)	(97,545,440)
8528126401	RECEPTION APP. FR TV, COLOR, WITH A FLAT PANEL SCR	(16,912)	(563,200)	0	(36,011)	(12,275,384)	(65,600,207)	(241,126,694)
8528126801	RECEPTION APPARATUS FOR TV, COLOR, WITH A FLAT PAN	(5,637,875)	(5,323,464)	(11,000,000)	(31,000,000)	(68,543,667)	(80,697,572)	(98,901,630)
8528127201	RECEPTION APPARATUS FOR TV, COLOR, WITH A FLAT PAN	(325,140)	(1,788,637)	(1,480,530)	(36,000,000)	(283,000,000)	(994,591,384)	(2,230,578,689)
8528127601	REC TV, COLOR, WITH A FLAT PANEL SCR, INCORPORATING VIDEO R	(123,840)	(1,061,500)	(1,874,344)	(637,859)	(1,309,902)	(2,878,048)	(2,395,330)
8528128001	REC TV, COLOR, VIDEO RECORD OR REPRODUCING, EXC 34.29CM			(5,204)	(26,842)	(30,008)	(9,419)	(9,163,803)
8528128401	RECEPTION APPARATUS FOR TELEVISION, COLOR, WITH A	(174,528)	0	(71,272)	0	(180,105)	(94,941)	(5,972,846)
8528129200	RECEPTION APPARATUS FOR TELEVISION, COLOR, WITH A	0	(3,987,022)	(3,558,018)	(724,436)	(74,279,611)	(409,783,025)	(747,617,573)
8528129300	RECEPTION APPARATUS FOR TV, COLOR, WITH A PRINTED	(181,972)	(27,502,537)	(51,000,000)	(57,000,000)	(48,196,971)	(49,903,151)	(34,742,575)
8528129700	RECEPTION APPARATUS FOR TELEVISION, COLOR, WITH A	(172,374)	(917,242)	(327,761)	(3,452,460)	(5,957,022)	(9,661,482)	(45,465,501)
8528301000	VIDEO PROJECTORS, COLOR, INCOMPLETE, NOT INCORP A	0	(45,500)	0	0	(66,500)	(1,155,205)	(81,539)
8528302000	VIDEO PROJECTORS, COLOR, INCOMPLETE, NOT INCORPORA	0	(3,175)	(294,000)	(887,758)	(354,381)	(151,062)	(174,931)
8528303000	VIDEO PROJECTORS, CLR, NON-HI DEF, W/ CRT, W/ REC/REP	0					0	(130,445)
8528304000	VIDEO PROJECTORS, CLR, NON-HD, W/ CRT, NESOI	0	(3,352)	0	0	(5,064)	0	(143,194)
8528306000	VIDEO PROJECTORS, COLOR, HI DEFINITION W/ CRT, NESOI	0					0	(2,270,012)
8528306201	VIDEO PROJ, CLR, FLAT PNL, SCR, W/ REC/REP, LT=34.29 CM					(267,130)	(68,000)	(154,224)
8528306401	VIDEO PROJ, CLR, FLAT PNL, SCR, W/ REC/REP GT 34.29 CM			0	(2,500)	(2,500)	0	(8,829)
8528306601	RECEPT. APP. FOR TELEVIS. VIDEO PROJ, COLOR, FLAT	(255,750)	(21,116,469)	(36,000,000)	(210,000,000)	(497,000,000)	(659,322,924)	(967,816,683)
8528306801	RECEPT. APP. FOR TELEVIS. VIDEO PROJECT, COLOR, F	0	(258,400)	0	(266,052)	(154,747)	(1,389,973)	(2,145,369)
8528307200	VIDEO PROJECTORS, COLOR, NESOI, INCORPORATING VIDE	(4,200)	0	(2,906)	(7,416)	0	(29,315)	(239,531)
8528307800	VIDEO PROJECTORS, COLOR, NESOI	(4,200)	(4,397)	(13,334)	(26,639)	(342,260)	(490,238)	(1,982,159)
8529900900	PRINTED CIRCUIT ASSEMBLIES, OTHER THAN TUNERS, PRI	(5,371)	0	(7,822)	(73,637)	(3,614,186)	(2,588,220)	(131,119)
8529901620	PRINT CIR ASSEMBLS, ASSEMBLS & SUBASSEMBLS OR RADAR			(24,244)	(36,019)	(11,493)	(2,557)	(25,429)
8529901640	PRINTED CIRCUIT ASSEMBLIES, ASSEMBLIES, & SUBASSEMBL	(64,198)	(37,260)	(9,463)	(40,000)	(53,320)	(69,240)	(37,193)
8529901660	PRNTD CIR ASSEMBLS, ASSEMBLS & SUBASSEMBLS CO	(533,302)	(165,680)	(187,193)	(178,268)	(336,426)	(409,778)	(649,113)
8529901920	PRNTD CIR ASSEMBLS, NOT ASSEM & SUBASSEM OF RADAR	0	0	0	(5,980)	0	0	(12,546)
8529901940	PRINTED CIRCUIT ASSEMBLIES, NOT ASSEMBLIES AND SUB	0	(4,066)	(58,201)	(449,255)	(79,063)	(79,720)	(1,572,631)
8529901960	PRINTED CIRCUIT ASSEMBLIES, NOT ASSEMBLIES AND SUB	(232,559)	(285,941)	(307,165)	(735,769)	(570,270)	(463,136)	(370,679)
8529902600	TRANCEIVER ASSEMBLIES FOR THE APPARATUS OF SUBHEAD	0	(6,500)	(8,673)	(82,775)	(19,275)	(379,000)	(485,186)
8529903000	PARTS OF TELEVISION CAMERAS	689,460	111,512	861,078	3,519,069	5,757,997	1,463,248	722,914
8529903900	PARTS OF TELEVISION RECEIVERS, EXCEPT TUNERS, SUBAS	(4,486,331)	(1,235,425)	(575,479)	(3,122,911)	(51,769,302)	(112,106,430)	(49,936,902)
8529904720	PARTS FOR RADAR APPARATUS	513,625	1,049,806	1,246,623	930,495	1,419,592	893,016	2,565,740
8529904740	PARTS FOR RADIO NAVIGATIONAL AID APPARATUS (EXCEPT	819,568	5,077,890	1,703,111	2,696,086	2,185,268	5,074,107	11,604,167
8529904760	PARTS FOR RADIO REMOTE CONTROL APPARATUS	421,475	938,127	5,582,254	6,770,149	6,722,278	3,229,008	3,929,925
8529904900	COMBINATION OF PARTS SPECIFIED IN ADDITIONAL U.S.	(245,339)	0	(739,000)	(280,224)	(179,582)	(426,136)	(523,094)
8529906300	OTHER PARTS OF PRINTED CIRCUIT ASSEMBLIES, INCLUDI	0	(2,700)	0	0	0	(16,768)	(37,677)
8529907300	OTHER PARTS OF PRINTED CIRCUIT ASSEMBLIES, INCLUDI	(282,720)	(228,887)	(233,395)	(354,725)	(572,850)	(534,596)	(385,566)
8529907800	MOUNTED LENSES FOR TELEVISION CAMERAS & OTHER PART	0	(30,725)	(75,984)	(145,649)	(352,522)	(935,196)	(1,626,930)
8529908100	OTHER PARTS OF ARTICLES OF HEADINGS 8525 AND 8527,	(253,487)	(669,856)	(243,067)	(450,430)	(535,373)	(1,761,749)	(3,937,538)
8529909520	ASSEMBLIES & SUBASSEMBLIES, OF RADAR APPARATUS					(129,597)	(344,437)	(57,771)
8529909540	ASSEMBLIES AND SUBASSEMBLIES, CONSISTING OF 2 OR MO	(58,249)	(22,698)	(12,084)	(68,839)	(515,541)	(736,990)	(209,881)
8529909560	ASSEMBLIES AND SUBASSEMBLIES, CONSISTING OF 2 OR MO	(435,367)	(155,527)	(285,341)	(457,225)	(485,233)	(115,992)	(409,754)
8529909720	OTHER PARTS OF RADAR APPARATUS, EXCEPT ASSEMBLIES	0	(3,084)	(2,267)	0	(2,500)	(6,926)	(900,692)
8529909740	OTHER PARTS OF RADIO NAVIGATIONAL AID APPARATUS (E	(63,730)	(360,552)	(786,414)	(1,419,411)	(542,880)	(1,669,041)	(5,289,430)
8529909760	OTHER PARTS OF RADIO REMOTE CONTROL APPARATUS, EXC	(465,536)	(259,849)	(125,176)	(236,984)	(846,237)	(1,192,115)	(1,646,049)
8534000020	PRINTED CIRCUITS HAVING A BASE OF PLASTIC IMPREGNA	(127,642,764)	(86,249,360)	(75,000,000)	(92,000,000)	(115,801,838)	(176,725,070)	(281,151,294)
8537109030	NUMERICAL CONTROLS FOR CONTROLLING MACHINE TOOLS	521,023	1,385,467	910,804	185,121	585,232	610,948	(281,715)
8537109050	PANEL BOARDS AND DISTRIBUTION BOARDS, FOR VOLTAGES	(9,121,734)	(7,444,167)	(5,890,487)	(5,819,908)	(18,644,637)	(15,198,285)	(19,443,663)
8537109060	PROGRAMMABLE CONTROLLERS	(45,173,035)	(36,363,438)	(40,000,000)	(30,000,000)	(45,571,940)	(70,442,547)	(60,339,360)
8540790000	MICROWAVE TUBES, NESOI	26,500	130,552	33,200	70,300	599,725	346,117	(458,686)
8540890060	LIGHT-SENSING TUBES	(42,984)	(56,616)	(1,341,406)	(4,120,301)	(5,802,445)	(6,506,187)	(7,727,636)
8541100040	UNMOUNTED CHIPS, DICE, WAFERS FOR DIODES OTHER THA	8,855,990	16,806,564	7,176,466	1,440,493	18,704,930	7,684,060	9,127,244
8541100050	ZENER DIODES	(3,623,408)	(6,471,287)	(15,000,000)	(9,425,630)	(13,405,133)	(13,344,317)	(19,784,061)
8541100060	MICROWAVE DIODES	6,610,996	6,017,290	6,122,123	2,800,400	2,986,784	2,318,548	4,417,010
8541100070	DIODES, OTHER THAN PHOTSENSITIVE OR LED, WITH A MA	(2,512,904)	(3,224,950)	(5,477,724)	(5,776,976)	(6,313,645)	(7,615,432)	(11,222,562)
8541100080	SEMICONDUCTOR DIODES NOT PHOTSENSITIVE OR LED, WITH	(55,428,309)	(30,966,058)	(48,000,000)	(61,000,000)	(82,080,747)	(94,050,773)	(107,884,725)
8541210040	UNMOUNTED CHIPS, DICE, WAFERS FOR TRANSISTORS OTH	902,624	1,228,413	6,960,722	4,284,374	3,003,008	1,755,241	(125,988)
8541210075	TRANSISTORS OTHER THAN PHOTSENSITIVE, WITH A DISS	(3,390,661)	(929,963)	(1,384,928)	(2,817,495)	(6,655,071)	(8,997,711)	(10,305,661)
8541210080	TRANSISTORS, OTHER THAN PHOTSENSITIVE, WITH A DISS	7,197,347	11,587,827	5,852,799	6,118,432	3,556,315	2,923,596	3,150,738
8541210095	TRANSISTORS OTHER THAN PHOTSENSITIVE, WITH A DISS	(21,807,333)	(24,489,216)	(41,000,000)	(33,000,000)	(43,936,413)	(46,669,237)	(54,399,359)
8541290040	UNMOUNTED CHIPS, DICE AND WAFERS FOR TRANSISTORS O	96,032,350	94,891,798	113,000,000	146,000,000	126,557,134	83,512,938	66,904,330
8541290075	TRANSISTORS OTHER THAN PHOTSENSITIVE, DISSIPATION	(54,050)	(1,142,913)	(964,123)	(1,695,354)	(3,317,240)	(2,542,773)	(1,989,759)
8541290080	TRANSISTORS, OTHER THAN PHOTSENSITIVE, WITH A DISSI	11,697,318	13,804,725	7,265,250	5,595,927	16,890,271	27,971,123	46,112,919
8541290095	TRANSISTORS OTHER THAN PHOTSENSITIVE, DISSIPATION	(50,757,169)	(29,279,252)	(27,000,000)	(27,000,000)	(34,263,133)	(42,188,092)	(64,957,148)
8541300040	UNMOUNTED CHIPS, DICE & WAFERS FOR THYRISTORS, DIA	165,986	42,521	81,543	43,774	296,256	536,194	213,323
8541300080	THYRISTORS, DIACS & TRIACS, OTHER THAN PHOTSENSIT	1,112,582	(256,431)	(1,545,903)	(931,567)	(1,029,629)	(22,361,116)	(2

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HS Code	Commodity Description	2000	2001	2002	2003	2004	2005	2006
8541407040	UNMOUNTED CHIPS, DICE AND WAFERS FOR PHOTSENSITIV	73,785	299,190	759,263	(89,909)	(48,433)	(213,006)	73,394
8541407080	PHOTOSENSITIVE TRANSISTERS	(607,009)	(365,524)	(520,114)	(838,951)	(300,321)	295,631	(602,375)
8541408000	OPTICAL COUPLED ISOLATORS	(9,634,986)	(5,519,511)	(587,287)	(279,740)	(3,949,469)	(6,058,036)	(14,387,628)
8541409500	PHOTOSENSITIVE SEMICONDUCTOR DEVICES, NESOI	3,210,279	7,868,799	(4,871,100)	(2,698,999)	(5,957,610)	(4,823,409)	(6,365,251)
8541500040	UNMOUNTED CHIPS, DICE, WAFERS FOR SEMICONDUCTOR DE	249,280	600,154	(126,039)	(449,406)	(6,050,422)	19,021,306	37,143,261
8541500080	SEMICONDUCTOR DEVICES, NESOI	(5,339,902)	3,681,302	12,203,553	(1,904,595)	5,091,619	6,788,716	9,280,163
8541900000	PARTS FOR DIODES, TRANSISTORS & SIMILAR SEMICONDUCT	7,997,327	13,214,154	7,392,594	16,251,298	30,167,438	9,674,045	(1,074,932)
8542100000	CARDS INCORP. ELEC. INTEGRATED CIRCUIT (SMART CARDS)			8,064,970	(2,771,807)	(7,884,687)	(19,738,898)	(33,634,864)
8542120000	MONOLITHIC DIGITAL INTEGRATED CIRCUITS; CARDS INCO	2,583,044	(3,302,260)					
8542134000	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, MOS TECHN	219,214	1,745,439					
8542138005	UNMOUNTED CHIPS, DICE WAFERS OF SILICON FOR DIGITA	307,756,034	316,279,102					
8542138010	UNMOUNTED CHIPS, DICE, & WAFERS OTHER THAN SILICON	15,733,063	117,984,802					
8542138012	MONOLITHIC IC'S, DIGITAL, SILICON, (MOS), VOLATIL	0	3,216,998					
8542138021	MONOLITHIC INTEGRATED CIRCUITS OF SILICON, DIGITAL	(74,880)	0					
8542138022	MONOLITHIC INTEGRATED CIRCUITS OF SILICON, DIGITAL	(287,327)	0					
8542138023	MONOLITHIC INTEGRATED CIRCUITS OF SILICON, DIGITAL	(278,106)	0					
8542138024	MONOLITHIC INTEGRATED CIRCUITS OF SILICON, DIGITAL	(135,933)	0					
8542138025	MONOLITHIC IC'S, DIGITAL, SILICON, (MOS), VOLATIL	0	10,381,536					
8542138026	MONOLITHIC INTEGRATED CIRCUITS OF SILICON, DIGITAL	(1,883,114)	(402,802)					
8542138027	MONOLITHIC IC'S, DIGITAL, SILICON, (MOS), VOLATIL	8,994,456	0					
8542138028	MONOLITHIC IC'S, DIGITAL, SILICON, (MOS), VOLATIL	15,955,266	0					
8542138029	MONOLITHIC INTEGRATED CIRCUITS OF SILICON, DIGITAL	0	(184,957)					
8542138030	MONOLITHIC INTEGRATED CIRCUITS OF SILICON, DIGITAL	0	(8,113,805)					
8542138031	MONOLITHIC INTEGRATED CIRCUITS OF SILICON, DIGITAL	0	(4,061,092)					
8542138032	MONOLITHIC INTEGRATED CIRCUITS OF SILICON, DIGITAL	0	(6,135,161)					
8542138034	MONOLITHIC INTEGRATED CIRCUITS OF SILICON, DIGITAL	(44,792,573)	0					
8542138037	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	(88,050)	0					
8542138038	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	(111,227)	0					
8542138039	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,M	(97,428)	0					
8542138041	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL,SILICON, M	(1,424,795)	0					
8542138043	MONOLITHIC IC'S, DIGITAL, SILICON, (MOS), VOLATIL	1,329,863	(2,260,238)					
8542138044	MONOLITHIC IC'S, DIGITAL, SILICON, (MOS), VOLATIL	696,885	5,215,638					
8542138045	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL,SILICON, M	0	(5,516)					
8542138049	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	(620,633)	(289,918)					
8542138051	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	(59,896,007)	(42,603,887)					
8542138052	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	(6,799,814)	(4,409,486)					
8542138056	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	7,969,229	6,816,861					
8542138057	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	(70,079,120)	(42,520,187)					
8542138058	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL,SILICON, M	(598,378)	(351,845)					
8542138059	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	(3,044,237)	(2,650,630)					
8542138060	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	(12,999,372)	(6,444,559)					
8542138061	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	710,519	651,565					
8542138065	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	15,965,964	(1,557,363)					
8542138066	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	(51,315,130)	(43,394,327)					
8542138067	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	183,484	181,620					
8542138068	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	5,061,780	13,838,637					
8542138072	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	29,228,247	(2,503,712)					
8542138092	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, OTHER THA	(486,406)	127,127					
8542138096	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, OTHER THA	5,002,470	7,890,121					
8542144000	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, BIPOLAR T	(22,742)	51,447					
8542148001	UNMOUNTED CHIPS, DICE, & WAFERS OF SILICON FOR DIG	99,549	21,510,804					
8542148002	UNMOUNTED CHIPS, DICE, & WAFERS OTHER THAN SILICON	234,850	2,800,754					
8542148004	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	2,047,187	402,679					
8542148007	MONOLITHIC INTEGRATED CIRCUITS OF SILICON, DIGITAL	33,602	(348,845)					
8542148011	MONOLITHIC INTEGRATED CIRCUITS OF SILICON, DIGITAL	(472,008)	(80,577)					
8542148012	MONOLITHIC INTEGRATED CIRCUITS OF SILICON, DIGITAL	453,885	953					
8542148017	MONOLITHIC INTEGRATED CIRCUITS OF SILICON, DIGITAL	1,009,815	(6,330,229)					
8542148092	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, OTHER THA	(2,380)	(5,100)					
8542148096	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, OTHER THA	1,159,256	449,127					
8542194000	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, OBTAINED	374,531	100,960					
8542198001	UNMOUNTED CHIPS, DICE, & WAFERS OF SILICON FOR DIG	(160,517)	(224,995)					
8542198002	UNMOUNTED CHIPS, DICE, & WAFERS OTHER THAN SILICON	962,004	1,315,680					
8542198073	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	7,116	(114,403)					
8542198078	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	(4,705,447)	(3,188,091)					
8542198079	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, SILICON,	979,820	1,512,737					
8542198092	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, OTHER THA	(201,890)	2,680					
8542198096	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, OTHER THA	17,980,710	20,821,898					
8542214000	MNLTHC IC DGTL, FOR HIGH DEF TV GT 100000 GTS			9,841,524	13,962,927	6,031,152	2,164,495	4,578,949
8542218005	CHIPS & WAFERS OF SILICON DGTL MNLTHC IC			645,000,000	1,320,000,000	1,384,004,804	1,733,316,849	3,060,128,748
8542218010	UNMTD CHP, DICE & WAFR FOR DGTL MNLTHC IC, EX SLCN			5,399,095	4,142,388	7,038,177	25,428,269	134,110,141
8542218020	MONO INTGR CRCT SLCN DGTL VLTLMEM DRAM LT=16 MB					0	(1,650,070)	(15,505,807)
8542218021	MONO IC,DIG,DRAM,NOT OVER 1,000,000 BITS			15,931,793	2,155,245	4,936,162	829,093	1,605,721
8542218022	MNLTHC IC,SLCN,DGTL,VOLTL MEMRY,DRAM, 1-8 MEGABITS			(593,419)	(566,266)	(1,203,585)		
8542218023	MNLTHC IC,SLCN,DGTL,VOLTL MEMRY,DRAM, 8-16 MEGABIT			(88,065)	(257,693)	(154,719)		
8542218024	MNLTHC IC,SLCN,DGTL,VOLTL MEMRY,DRAM,16-64 MEGABIT			(1,498,481)	(971,571)	(3,032,765)	(5,863,416)	(3,337,714)
8542218025	MNLTHC IC,SLCN,DGTL,VOLTL MEMRY,DRAM, 64-128 MEGBT			(9,205,148)	(640,055)	(43,742,386)	(48,753,408)	(24,573,405)
8542218026	MONO INT CRC SLCN DGT VLT MEM DRAM GT 128 LT=256MB					0	(61,296,485)	(39,628,161)
8542218027	MONO INT CRC SLCN DGT VLT MEM DRAM GT 256 LT=512MB					0	(76,650,498)	(219,599,303)
8542218028	MONO INT CRC SLCN DGT VLT MEM DRAM GT 512MB LT=1GB			160,000,000	221,000,000	198,000,000	183,829,825	358,004,623
8542218029	MNLTHC IC,DGTL,SI,VOLTILE MEM,DRAM, GT 128 MEGABIT			(12,000,000)	(6,637,948)	(47,828,289)		
8542218030	MONO INTEGR CIRCT SLCN DGTL VOLTL MEM DRAM GT 1 GB					0	(5,542,967)	(2,781,222)
8542218031	MONO IC,DGTL,SILCON,VOLATIL,(SRAM)LT 256 KBITS			1,557,155	1,216,183	(217,322)	4,052	3,808,400
8542218032	MNLTHC IC,SLCN,DGTL,VOLTL MEMRY,SRAM,256KLB-2MEGB			(16,508)	(1,163,602)	(1,245,582)	(1,441,574)	(1,352,489)
8542218038	MONOLITHIC INTEGRATED CIRCUIT SRAM GT 256 KILOBITS			2,137,880	913,595	2,751,765	3,012,541	3,839,571
8542218039	MNLTHC IC,SLCN,DGTL,VOLTL MEMRY,SRAM, OVR 2MEGABIT			(1,232,439)	(4,500,950)	(3,749,081)	(2,478,015)	(3,191,982)
8542218041	MNLTHC IC,SLCN,DGTL,EX VOLTL,EEPROM, NT OVR 64 KLB			(18,000,000)	(12,000,000)	(10,245,494)	(10,814,730)	(10,437,074)
8542218042	MNLTHC IC,SLCN,DGTL,EX VOLTL,EEPROM,64-512 KILOBIT			(4,789,582)	(4,319,299)	(4,940,533)	(3,725,546)	(3,480,217)
8542218048	MONOLITHIC INTEG CIRCUIT, DIGITL,(EEPROM),ELEC ERAS			9,584,625	17,659,631	37,814,348	192,179,529	351,241,435
8542218049	MNLTHC IC,SLCN,DGTL,EX VOLTL,EEPROM,OVER 512KILBT			(51,000,000)	(96,000,000)	(149,000,000)	(238,352,817)	(174,276,658)
8542218051	MNLTHC IC,SLCN,DGTL,EX VOLTL,EPROM, NT OVR 64KLB			(242,130)	(91,657)	(281,220)	(223,190)	(700,935)
8542218052	MNLTHC IC,SLCN,DGTL,EX VOLTL,EPROM,64-512 KILOBITS			(1,163,732)	(1,147,016)	(474,883)	(325,270)	(253,935)
8542218058	MONOLITHIC INTEGRATED CIRCUITS, DIGITAL, (EPROM)			664,863	976,920	2,651,293	2,778,282	2,649,469
8542218059	MNLTHC IC,SLCN,DGTL,EX VOLTL,EPROM,OVR 512KILOBITS			(2,902,466)	(5,025,458)	(1,040,447)	(354,646)	(1,283,197)
8542218060	MONOLITHIC IC, DIGITAL, SILICON, NESOI			14,075,482	17,149,600	101,092,172	11,965,586	12,154,217
8542218071	MONO IC,DIG,SIL,(ASIC)&(PLA)MICROPROC LT 8 BITS			(16,000,000)	(13,000,000)	(9,225,871)	(16,276,358)	(21,369,878)

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HS Code	Commodity Description	2000	2001	2002	2003	2004	2005	2006
8542218072	MONO IC,DIG,SIL,(ASIC)&(PLA)MICROPROCES 16 BITS			5,184,934	7,149,890	2,133,532	436,901	(15,411,051)
8542218079	MONO IC,DIG,SIL,(ASIC)&(PLA) MCRPROC GT 32BITS			45,755,616	(34,000,000)	(135,445,085)	(154,591,022)	(134,918,384)
8542218081	MNLTHC IC,SLCN,DIGITAL,EX MICROPROCR,TTL			(263,664)	(1,136,613)	(702,238)	(658,480)	(2,452,478)
8542218082	MNLTHC IC,SLCN,DIGTL,EX MICROPROCR,ECL			(95,714)	(5,103)	(59,504)	(85,534)	(239,572)
8542218088	MONOLITHIC INTEGRAT CIRCUITS DIGITL, NT MEM,NESOI			79,091,108	112,000,000	239,000,000	279,697,007	468,258,212
8542218089	MNLTHC IC,SLCN, DGTL, EX MICROPROCR, NESOI			(140,000,000)	(91,000,000)	(125,000,000)	(116,053,639)	(176,617,819)
8542218091	MONOLITHIC IC,DIGITAL, MEMRY, (EXCPT SILCON, NESOI			1,635,391	4,201,009	1,045,214	1,542,411	521,962
8542218099	MONOLITHIC IC,DIGITAL, EXCPT SILCN OR DIGTL, NESOI			30,926,472	31,912,137	20,671,536	4,373,723	12,105,407
8542290010	CHPS,DCE,WFRS MONOLITHIC INTEGRAT CIRCUIT,EXEP DIGL			92,308,527	89,071,896	122,616,464	179,881,306	515,577,815
8542290020	MONOLITHIC IC'S,EXE DIGL,OPRAT FREQ GE 100MHZ,NESO			13,240,114	64,939,073	66,676,694	36,644,263	24,212,739
8542290030	MONOLITHIC IC, FREQUENCY LT 100 MHZ, LOGIC, NESOI			(398,757)	(2,540,078)	50,036,177	1,089,442	3,172,060
8542290040	MONOLITHIC IC,FREQ,LT100MHZG, OTHR THN LGC, NESOI			26,543,602	4,830,185	10,707,969	22,248,095	43,924,922
8542290050	MONOLITHIC IC,OPERATING FREQUCY LT 100 MHZ, NESOI			1,519,102	(1,156,437)	(16,283,283)	(84,019,650)	(143,393,032)
8542300040	UNMOUNTED CHIPS, DICE, WAFERS FOR MONOLITHIC INTEG	15,830,355	46,302,637					
8542300060	MONOLITHIC INTEGRATED CIRCUITS, WITH AN OPERATING	2,657,297	6,201,710					
8542300065	MONOLITHIC INTEGRATED CIRCUITS, WITH AN OPERATING	(7,825,207)	15,256,029					
8542300080	MONOLITHIC INTEGRATED CIRCUITS, WITH AN OPERATING	(5,810,015)	2,701,397					
8542300090	MONOLITHIC INTEGRATED CIRCUITS, WITH AN OPERATING	(2,001,904)	1,802,613					
8542400075	HYBRID INTEGRATED CIRCUITS, WITH AN OPERATING FREQ	2,820,532	7,310,920					
8542400095	HYBRID INTEGRATED CIRCUITS, NESOI	(16,585,714)	(14,737,206)					
8542500000	ELECTRONIC INTEGRATED CIRCUITS ,NESOI, AND MICROAS	8,230,593	10,912,170					
8542600075	HYBRID INTEGRATED CIRCUITS,WITH FREQUENCY GE 30MHZ			7,149,231	(200,872)	(4,059,563)	(21,510,715)	15,102,965
8542600095	HYBRID INTEGRATED CIRCUITS, NESOI			(10,000,000)	(432,769)	662,643	6,567,648	(8,634,553)
8542700000	ELECTRONIC MICROASSEMBLIES			5,279,618	10,537,192	19,752,213	9,091,965	61,770,340
8542900000	PARTS FOR ELECTRONIC INTEGRATED CIRCUITS AND MICRO	4,998,362	21,544,444	8,651,336	25,114,731	38,607,016	16,554,968	49,579,747
8543110000	ION IMPLANTERS DESIGNED FOR DOPING SEMICONDUCTOR W	18,462,938	11,763,379	7,773,441	33,620,623	55,546,302	42,894,597	63,536,148
8543190000	PARTICLE ACCELERATORS, NESOI	(1,211,802)	1,459,903	1,217,839	2,884,624	2,367,836	3,737,232	4,408,335
8543200000	SIGNAL GENERATORS	1,193,204	8,254,721	7,496,166	6,078,231	8,061,261	4,053,564	3,770,699
8543891000	PVD APPARATUS FOR PROCESS OF SEMICONSUTOR MATS			46,523,808	55,930,411	182,986,841	46,957,308	69,901,767
8543892000	PHYSICAL VAPOR DEPOSITION (PVD) APPARATUS, NESOI			5,340,432	7,539,841	4,350,884	1,722,251	4,602,694
8544700000	INSULATED OPTICAL FIBER CABLES WITH INDIVIDUALLY S	(3,099,050)	(2,762,002)	2,568,232	(3,843,113)	(22,044,376)	(37,859,388)	(63,660,254)
8802110030	NEW HELICOPTERS, NON-MILITARY, OF AN UNLADEN WEIGH	1,755,000	0	1,533,135	382,989	2,302,305	2,266,871	423,144
8802110045	NEW HELICOPTERS, NON-MILITARY, UNLNDN WT 998-2000KG			0	388,000	0	886,000	2,498,000
8802120040	NEW HELICOPTERS, NON-MILITARY, OF AN UNLADEN WEIGH	0	16,833,698	0	0	0	20,554,655	4,500,000
8802300030	NEW MULTIPLE ENGINE AIRPLANES, NON-MILITARY, OF AN			6,999,000	0	0	6,036,780	0
8802300040	NEW TURBOFAN POWERED AIRPLANES, NON-MILITARY, OF A	34,646,778	58,978,831	63,750,057	0	0	46,741,606	14,818,000
8802300050	NEW MULTI ENG PLANES,NOT TURBOFAN,(4536-15000 KG)			0	0	0	5,350,000	18,046,124
8802400040	NEW AIRCRAFT PASSENGER TRANSPORTS, NON-MILITARY, O	1,105,828,801	1,478,048,624	1,940,000,000	1,890,000,000	1,490,000,000	3,092,488,311	3,906,501,455
8802400060	NEW AIRCRAFT CARGO TRANSPORTS, NON-MILITARY, OF AN	318,586,013	589,979,562	1,000,000,000	0	0	442,657,188	1,073,000,483
8802603000	COMMUNICATIONS SATELLITES			0	0	0	0	0
8803100010	PROPELLERS AND ROTORS AND PARTS THEREOF FOR USE IN	1,633,110	4,415,455	1,493,062	1,499,321	692,116	2,503,055	7,534,827
8803100015	PROPS & RTRS & PARTS FOR CVL ARCT, FOR DOD OR USCG			0	0	0	147,629	647,668
8803100030	PROPELLERS AND ROTORS AND PARTS THEREOF FOR USE IN	(5,000)	0	(7,800)	(4,716)	(9,116)	0	(34,300)
8803100050	PROPELLERS AND ROTORS AND PARTS THEREOF FOR USE IN	4,432,883	405,050	1,660,891	2,005,918	89,617	147,629	647,668
8803100060	PROPLERS & ROTORS & PARTS THEREOF FOR MILITARY AIR			0	0	0	(40,000)	0
8803200010	UNDERCARRIAGES AND PARTS THEREOF FOR USE IN CIVIL	3,910,439	4,033,689	5,695,360	6,167,223	12,691,593	18,709,443	33,603,032
8803200030	UNDERCARRIAGES AND PARTS THEREOF FOR USE IN CIVIL	(557,266)	(1,353,995)	(149,929)	(20,983)	(23,495)	(282,862)	(341,871)
8803200050	UNDERCARRIAGES AND PARTS THEREOF FOR USE IN MILITA	270,741	19,762	192,043	96,024	4,336,120	2,273,585	346,960
8803200060	UNDERCARRIAGES & PARTS THEREOF FOR MILITARY AIR			0	(67,200)	(55,652)	(65,652)	(124,552)
8803300010	OTHER PARTS OF AIRPLANES OR HELICOPTERS FOR USE IN	206,542,211	256,410,782	249,000,000	264,000,000	308,000,000	511,661,628	719,882,845
8803300015	OTHER PARTS OF AIRPLANES OR HELICOPTERS, NESOI, FO	(84,382)	0	(164,743)	(11,500)	0	1,181,715	(3,765)
8803300030	OTHER PARTS OF AIRPLANES OR HELICOPTERS, NESOI, FO	(31,582,443)	(55,862,988)	(51,000,000)	(52,000,000)	(67,615,910)	(70,546,148)	(114,507,201)
8803300050	OTHER PARTS OF AIRPLANES OR HELICOPTERS FOR USE IN	1,226,285	1,349,644	4,093,233	5,344,630	2,648,393	5,275,728	2,355,144
8803300060	OTHER PARTS OF AIRPLANES OR HELICOPTERS FOR USE IN	(792,026)	(1,235,828)	(2,183,094)	(8,939,280)	(10,601,781)	(12,415,543)	(14,220,324)
8803903000	PARTS OF COMMUNICATIONS SATELLITES	(12,950)	96,234	108,304	283,257	230,722	574,695	265,334
8805200000	GROUND FLYING TRAINERS AND PARTS THEROF	3,842,130	810,262					
8805210000	AIR COMBAT SIMULATORS AND PARTS THEREOF			(11,334)	26,500	79,910	72,920	53,000
8805290000	GROUND FLYING TRAINERS AND PARTS THEREOF, NESOI			13,007,753	500,879	302,500	645,469	256,672
9001100000	OPTICAL FIBERS, OPTICAL FIBER BUNDLES AND CABLES E	20,262,175	47,480,974	3,439,906	5,127,902	3,059,155	5,484,464	20,989,137
9001100030	OPTICAL FIBERS FOR TRANSMISSION OF VOICE, DATA OR	(30,740,411)	(25,134,835)	(4,792,605)	(2,369,200)	(3,352,319)	(3,386,642)	(2,645,329)
9001100070	OPTICAL FIBERS EXCEPT OF PLASTIC, NESOI	(653,570)	(2,139,682)	(1,473,791)	(472,971)	(494,613)	(77,461)	(257,642)
9001100085	OPTICAL FIBERS BUNDLES AND CABLE OTHER THAN THOSE	(284,502)	(1,178,995)	(628,453)	(670,386)	(696,159)	(1,211,888)	(849,459)
9001901000	LENSES, PRISMS, AND MIRRORS, UNMOUNTED, NESOI	3,063,323	2,052,844	2,379,860	2,295,489	3,627,856		
9001904000	LENSES, UNMOUNTED, NESOI	(8,746,720)	(15,814,527)	(14,000,000)	(16,000,000)	(16,727,008)		
9001905000	PRISMS, UNMOUNTED, NESOI	(1,100,146)	(1,424,767)	(848,574)	(1,308,683)	(1,437,191)		
9001906000	MIRRORS, UNMOUNTED, NESOI	(316,861)	(1,104,093)	(1,218,068)	(1,154,188)	(2,078,602)		
9001909000	OPTICAL ELEMENTS, UNMOUNTED, NESOI	(9,251,750)	(10,747,573)	(3,349,737)	(6,514,510)	(15,221,436)		
9002902000	PRISMS MOUNTED, NESOI	(170,878)	(265,945)	(256,286)	(681,675)	(1,693,790)		
9002904000	MIRRORS MOUNTED, NESOI	(884,301)	(633,245)	(740,941)	(1,552,354)	(1,336,164)		
9002909500	OPTICAL ELEMENTS, NESOI	(5,090,535)	(2,750,585)	(2,905,552)	(2,262,844)	(2,916,148)	(3,254,434)	(5,692,602)
9005100020	PRISM BINOCULARS FOR USE WITH INFRARED LIGHT	(769,484)	(87,214)	(241,625)	(1,457,207)	258,546	(1,578,700)	(6,364,307)
9005804020	OPTICAL TELESCOPES FOR USE WITH INFRARED LIGHT	(18,438)	(18,614)	(141,860)	(33,306)	343,028	(40,470)	(57,682)
9005804040	OPTICAL TELESCOPES EXCEPT FOR USE WITH INFRARED LI	(44,581,601)	(26,809,687)	(27,000,000)	(40,000,000)	(41,666,050)	(39,718,190)	(46,830,018)
9006610040	DISCHARGE LAMP AND FLASHLIGHT APPARATUS CAPABLE OF	(990,036)	(425,494)	(137,903)	(413,375)	(1,356,136)	(454,168)	(2,208,694)
9007914000	PARTS FOR CAMERAS	(121,153)	(93,651)	(159,062)	(355,848)	(524,040)	(3,595,884)	(3,493,410)
9010410000	DIRECT WRITE-ON-WAFER APPARATUS			0	65,000	39,776	52,122	13,368
9010410040	E-BEAM DIRECT WRITE WAFER, PROJTN OF CIRCUIT PATRN						0	(6,843)
9010410080	DIRECT WRT WAFER APPT, FOR PROJCT OF CIRCUIT, NESOI						0	(2,145)
9010420000	STEP AND REPEAT ALIGNERS	1,138,000	0	515,199	607,451	1,093,875	101,730	3,597,864
9010490000	APPARATUS FOR THE PROJECTION OF CIRCUIT PATRNS NES	273,420	670,472	803,091	89,705	2,012,590	3,210,971	4,107,999
9011100000	STEREOSCOPIC MICROSCOPES	1,093,081	404,893	211,325	595,828	1,008,443	435,426	487,179
9011104000	STEREOSCOPIC MICROSCOPES WITH MEANS TO PHOTO IMAGE						(1,505,211)	(1,592,944)
9011108000	STEREOSCOPIC MICROSCOPES, NESOI						(3,366,051)	(3,647,098)
9011200000	MICROSCOPES, FOR MICROPHOTOGRAPHY&CINEMA ETC,NESOI	135,922	208,632	145,587	157,726	384,657	98,570	693,491
9011204000	MICROSCOPES, WITH MEANS TO PHOTOGRAPH THE IMAGE						(1,550,806)	(1,459,958)
9011208000	MICROSCOPES, EXC WITH MEANS TO PHOTOGRAPH IMAGE						(1,573,509)	(1,864,786)
9011800000	OTHER COMPOUND OPTICAL MICROSCOPES, NESOI	(16,407,703)	(13,732,991)	(15,000,000)	(16,000,000)	(17,252,538)	(18,025,347)	(17,297,354)
9011900000	PARTS AND ACCESSORIES FOR COMPOUND OPTICAL MICROSC	(5,349,078)	(2,612,670)	(3,809,755)	(4,585,135)	(6,527,025)	(5,738,400)	(4,059,536)
9012100000	MICROSCOPES OTHER THAN OPTICAL MICROSCOPES; DIFFRA	1,921,709	1,691,110	1,972,478	5,259,556	4,301,135	8,437,106	8,518,635
9012900000	PARTS AND ACCESSORIES FOR MICROSCOPES OTHER THAN O	(159,939)	2,013,712	1,827,435	3,652,627	808,466	1,678,660	(154,697)
9013103000	TELESCOPIC SIGHTS FOR RIFLE, NESOI	(391,939)	(382,347)	(194,867)	(209,361)	(456,248)	(692,022)	(875,803)
9013104000	PERISCOPES, TELESCOPES DESIGNED TO FORM PARTS OF M	(508,222)	(382,628)	(3,440,382)	(3,783,850)	(5,021,848)	(4,523,748)	(4,801,623)
9013200000	LASERS, OTHER THAN LASER DIODES	6,547,673	12,472,437	24,921,296	20,834,419	25,199,330	25,872,435	31,522,476
9013800000	OPTICAL DEVICES, APPLIANCES AND INSTRUMENTS, NESOI	8,321,931	5,873,729	3,864,701	8,756,018	5,056,448	16,261,965	9,367,202

US Balances in Advanced Technology Products Trade With China

HS Code	Commodity Description	2000	2001	2002	2003	2004	2005	2006
9014106040	GYROSCOPIC COMPASSES, OTHER THAN ELECTRICAL FOR US	0	40,200	0	0	3,354		
9014106080	GYROSCOPIC COMPASSES, EXC ELEC, EXC CIVIL AIRCRAFT					4,230		
9014107030	GYROSCOPIC ELECTRICAL DIRECTION FINDING COMPASSES	(4,526)	(22,500)	(7,200)	(4,900)	(12,690)	(37,224)	(33,200)
9014107040	GYROSCOPIC COMPASSES, ELECTRICAL FOR USE IN CIVIL	54,639	65,330	43,276	91,436	36,327	33,804	86,435
9014107060	OTHER ELECTRICAL DIRECTION FINDING COMPASSES	(640,798)	(886,012)	(834,971)	(1,856,386)	(403,458)	(1,079,429)	(844,383)
9014107080	GYROSCOPIC COMPASSES, ELECTRICAL, EXCEPT FOR USE I	307,605	199,396	1,328,342	323,458	4,507	37,721	6,293
9014109080	DIRECTION FINDING COMPASSES, EXCEPT FOR USE IN CIV	39,182	0	5,345	102,987	11,290		
9014202000	OPTICAL INSTRUMENTS AND APPLIANCES FOR AERONAUTICA	313,938	253,083	73,478	60,619	33,555	10,422	164,417
9014204000	AUTOMATIC PILOTS FOR AERONAUTICAL OR SPACE NAVIGAT	2,254,534	6,177,954	1,867,303	2,729,898	678,521	1,744,382	1,162,400
9014206000	ELECTRICAL INSTRUMENTS AND APPLIANCES FOR AERONAUT	1,034,141	3,468,088	759,212	535,733	1,601,623	2,171,032	3,395,232
9014208040	INSTRUMENTS AND APPLIANCES FOR USE IN CIVIL AIRCRA	4,637,048	4,155,020	3,936,499	4,686,392	5,559,443	5,957,355	8,555,591
9014208080	INSTRUMENTS AND APPLIANCES FOR AERONAUTICAL OR SPA	(784,587)	(883,428)	(286,001)	(1,384,553)	(1,176,668)	(791,953)	(1,582,058)
9014801000	OTHER OPTICAL INSTRUMENTS FOR NAVIGATION, NESOI	(214,381)	(178,511)	(214,074)	(160,875)	(235,736)	(253,181)	(422,321)
9014802000	SHIP LOGS AND DEPTH-SOUNDING APPARATUS FOR NAVIGA	(50,010)	(190,578)	(68,230)	(709,840)	(86,179)	(744,817)	(1,020,340)
9014804000	OTHER ELECTRICAL INSTRUMENTS AND APPLIANCES FOR NA	(1,833,003)	(2,914,742)	(2,935,264)	(2,825,599)	(1,585,431)	(2,416,257)	(13,038,341)
9014805000	OTHER NAVIGATIONAL INSTRUMENTS AND APPLIANCES, NES	(48,091)	(16,404)	(30,861)	(29,891)	(286,847)	(136,462)	(336,967)
9014900000	PARTS & ACCESSORIES FOR DIRECTION FINDING COMPASSE	3,899,917	3,472,416	2,689,193	2,172,367	1,405,806		
9014902080	PARTS AND ACCESSORIES FOR NAVIGATIONAL INSTRUMENTS	0	(2,160)	(15,000)	0			
9014904000	PARTS AND ACCESSORIES FOR NAVIGATIONAL INSTRUMENTS	0	(3,425)	(188,887)	(56,986)	(266,660)		
9014906000	PARTS AND ACCESSORIES FOR NAVIGATIONAL INSTRUMENTS	(971,045)	(588,019)	(1,986,110)	(1,348,026)	(3,460,727)		
9015100000	RANGEFINDERS	980,478	1,384,710	100,750	14,498	1,679,423	875,548	1,329,310
9015104000	ELECTRICAL RANGEFINDERS	(5,752,338)	(10,898,676)	(17,000,000)	(7,442,998)	(15,266,791)	(27,908,838)	(50,157,835)
9015108000	RANGEFINDERS, EXCEPT ELECTRICAL	(6,770,319)	(3,124,858)	(517,103)	(505,135)	(570,450)	(1,277,427)	(579,850)
9015204000	ELECTRICAL THEODOLITES AND TACHYMETERS	(19,802)	(12,210)	(5,250)	(379,023)	(1,512,407)	(2,887,313)	(5,539,593)
9015304000	ELECTRICAL SURVEYING LEVELS	(1,665,197)	(9,096,305)	(17,000,000)	(34,000,000)	(18,931,053)	(8,428,149)	(6,944,549)
9015400000	PHOTOGRAMMETRICAL SURVEYING INSTRUMENTS & APPLNCS					0	393,668	135,307
9015404000	ELECTRICAL PHOTOGRAMMETRICAL SURVEYING INSTRUMENTS	(2,857)	0	0	(10,000)	(52,592)	(529,012)	(781,605)
9015408000	PHOTOGRAMMETRICAL SURVEYING INSTRUMENTS AND APPLIA	(165,973)	(110,599)	(419,723)	(354,097)	(105,463)	(31,830)	(517,423)
9015802000	OPTICAL INSTRUMENTS AND APPLIANCES FOR SURVEYING	25,475	1,191,612	(579,011)	(2,586,989)	(1,406,186)	(1,149,610)	(1,329,251)
9015806000	SEISMOGRAPHS			0	0	(9,614)		(12,150)
9015808040	GEOPHYSICAL INSTRUMENTS AND APPLIANCES, NESOI	29,582,396	32,659,872	22,063,180	47,351,047	41,363,673	27,928,484	49,163,095
9015808080	OTHER SURVEYING INSTRUMENTS AND APPLIANCES, EXCLUD	753,259	(668,736)	1,080,917	(4,878,179)	(2,233,609)	5,600,599	2,538,546
9015900000	PARTS AND ACCESSORIES FOR SURVEYING	6,170,665	10,844,342	7,549,038	20,101,741	18,328,599		
9017205000	PATTERN GENERATION APPTS DESIGNED TO PRODUCE MASKS	631,206	7,488,424	3,334,955	903,706	4,967,527	9,050,249	6,477,233
9017207000	OTHER DRAWING, MARKING-OUT OR MATHEMATICAL CALCULA	(301,750)	0	(15,927)	(116,082)	(256,982)	(85,725)	(327,609)
9017208040	HAND OPERATED INPUT DEVICES WHICH TRANSMIT POSITIO	136,064	3,711,507	5,142,652	7,516,187	990,478	(16,673,889)	(11,158,264)
9018110040	ELECTROCARDIOGRAPHS	2,925,956	6,390,990	3,820,437	1,372,046	1,553,578	4,598,734	2,780,414
9018113000	ELECTROCARDIOGRAPHS	(6,692,938)	(5,062,236)	(1,755,119)	(2,335,290)	(2,173,888)	(2,047,120)	(2,977,934)
9018116000	PRINTED CIRCUIT ASSEMBLIES FOR ELECTROCARDIOGRAPHS	(161,259)	(51,156)	(15,709)	(244,993)	(1,466,823)	(768,818)	(1,225,862)
9018119000	PARTS AND ACCESSORIES FOR ELECTROCARDIOGRAPHS,NESOI	(1,096,071)	(607,067)	(1,323,932)	(1,250,191)	(2,029,770)	(3,720,999)	(2,131,096)
9018120000	ULTRASONIC SCANNING APPARATUS	20,608,025	28,456,952	23,770,613	41,563,745	49,713,162	52,964,009	51,778,406
9018130000	ELECTRO-DIAGNOSTIC APPARATUS, MAGNETIC RESONANCE	23,348,155	27,878,396	16,350,469	18,205,461	24,231,542	41,142,908	14,391,211
9018140000	ELECTRO-DIAGNOSTIC APPARATUS, SCINTIGRAPHIC APPARA	1,958,672	1,916,711	2,308,802	2,364,426	4,203,397	6,512,516	2,881,937
9018194000	ELECTRO-DIAGNOSTIC APPARATUS FOR FUNCTIONAL EXPLOR	5,777,691	5,058,291	7,324,753	18,437,145	18,117,056	15,070,158	13,755,805
9018195500	PATIENT MONITORING SYSTEMS	9,862,222	18,150,448	14,682,420	20,870,529	16,771,439	16,521,623	13,643,508
9018197500	PRINTED CIRCUIT ASSEMBLIES FOR PARAMETER ACQUISITI	264,032	134,120	480,933	437,021	2,955,790	1,505,849	3,741,031
9018199535	ELECTROENCEPHALOGRAPH (EEG) AND ELECTROMYOGRAPHS	1,316,532	884,976	1,070,303	1,338,356	1,157,469	3,315,867	4,298,187
9018199550	OTHER ELECTRO-DIAGNOSTIC APPARATUS, NESOI	2,860,689	29,342	(568,464)	4,826,345	12,215,701	14,380,383	12,088,981
9018199560	PART AND ACCESSORIES FOR ELECTRO-DIAGNOSTIC APPARA	(5,027,874)	(3,663,078)	(6,938,391)	(4,105,697)	(11,896,895)	(15,106,001)	(30,898,651)
9018500000	OTHER OPHTHALMIC INSTRUMENTS AND APPLIANCES AND PA	7,567,119	5,147,795	7,289,140	11,699,281	17,587,557	14,131,598	5,463,117
9018901500	OPTICAL INSTRUMENTS AND APPLIANCES AND PARTS AND A	818,676	3,042,768	742,399	832,601	2,517,266	4,696,712	1,211,830
9018903000	ANESTHETIC INSTRUMENTS AND APPLIANCES AND PARTS AN	3,318,443	5,012,982	4,226,338	2,948,132	5,249,689	6,333,021	5,142,827
9018906000	ELECTRO-SURGICAL INSTRUMENTS AND APPLIANCES AND PA	7,782,261	10,877,788	7,225,535	6,388,452	4,015,736	6,223,819	9,879,419
9018906400	DEFIBRILLATORS	(64,000)	0	(57,541)	(149,714)	(180,169)	(517,837)	(56,406)
9018906800	PRINTED CIRCUIT ASSEMBLIES FOR DEFIBRILLATORS OF S	(626,657)	(254,005)	(7,368)	(43,639)	(50,210)	(286,400)	(143,097)
9018907040	ULTRASONIC THERAPEUTIC APPLIANCES AND INSTRUMENTS	56,104	10,154	113,629	24,013	16,600	84,948	77,729
9018907060	OTHER THERAPEUTIC APPLIANCES AND INSTRUMENTS, EXCE	171,993	1,324,654	1,151,944	2,783,458	2,074,887	2,835,939	2,963,890
9018907080	OTHER MEDICAL INSTRUMENTS AND APPLIANCES AND PAR	2,701,285	3,118,175	7,114,588	5,831,728	6,559,103	18,460,876	21,186,150
9018907540	ULTRASONIC THERAPEUTIC APPLIANCES AND INSTRUMENTS			(13,129)	(27,060)	(2,130)	(9,750)	(26,810)
9018907560	OTHER THERAPEUTIC APPLIANCES AND INSTRUMENTS, EXCE	(68,720)	(177,969)	(38,049)	(220,311)	(1,789,623)	(6,676,929)	(6,348,278)
9018908000	OTHER INSTRUMENTS AND APPLIANCES USED IN MEDICAL,	(4,637,107)	(6,265,100)	(10,000,000)	(19,000,000)	(27,062,969)	(32,790,831)	(49,716,967)
9019102000	MECHANO-THERAPY APPLIANCES AND MASSAGE APPARATUS;	552,825	1,175,522	879,347	898,929	1,014,492		
9019102010	MECHANO-THERAPY APPLIANCES	(4,130,058)	(7,267,918)	(6,404,373)	(5,980,577)	(5,995,620)		
9019102020	MESSAGE APPARATUS; ELECTRICALLY OPERATED; BATTERY	(45,616,801)	(57,143,717)	(52,000,000)	(46,000,000)	(47,736,740)		
9019102030	MESSAGE APPARATUS; ELECTRICALLY OPERATED; BATTERY	(23,673,605)	(26,920,956)	(29,000,000)	(31,000,000)	(30,160,194)		
9019102035	MESSAGE APPARATUS, POWERED BY AC ADAPTER	(64,617,629)	(59,055,594)	(89,000,000)	(49,000,000)	(59,218,943)		
9019102045	MESSAGE APPARATUS,ELECTRICALLY OPERATED (EXCEPT BA	(68,762,635)	(58,999,221)	(61,000,000)	(110,000,000)	(119,000,000)		
9019102050	MESSAGE APPARATUS NOT ELECTRICALLY OPERATED	(3,855,413)	(5,610,279)	(7,337,539)	(8,698,452)	(10,635,681)		
9019102090	MECHANO-THERAPY APPLIANCES AND MASSAGE APPARATUS;	(2,463,215)	(5,170,865)	(4,857,231)	(5,935,675)	(11,867,170)		
9019106000	PSYCHOLOGICAL APTITUDE TESTING APPARATUS AND PARTS	(1,173,589)	(104,575)	(182,728)	(198,154)	(337,480)		
9019200000	OZONE THERAPY, OXYGEN THERAPY, AEROSOL THERAPY, AR	(10,146,422)	(10,942,543)	(18,000,000)	(22,000,000)	(34,050,062)	(60,711,232)	(85,014,873)
9021100090	ORTHOPEDIC OR FRACTURE APPLIANCES & PTS, NESOI			(34,000,000)	(41,000,000)	(63,146,444)	(76,586,664)	(98,842,756)
9021110000	ARTIFICIAL JOINTS AND PARTS AND ACCESSORIES	1,134,153	1,636,181					
9021198500	OTHER ORTHOPEDIC OR FRACTURE APPLIANCES AND PARTS	(16,160,574)	(23,064,181)					
9021300000	OTHER ARTIFICIAL PARTS OF THE BODY AND PARTS AND AC	(332,234)	(400,351)					
9021310000	ARTIFICIAL JOINTS AND PARTS AND ACCESSORIES			2,000,585	1,582,965	3,467,996	9,224,955	8,704,517
9021390000	OTH ARTIFICIAL PTS OF THE BODY & PTS & ACCESSORIES			(2,980,285)	(1,324,092)	3,184,109	4,392,134	14,592,502
9021400000	HEARING AIDS, EXCLUDING PARTS AND ACCESSORIES	(72,003)	(783,826)	(2,731,700)	(4,059,186)	137,487	(298,258)	(47,743,624)
9021500000	PACEMAKERS FOR STIMULATING HEART MUSCLES, EXCLUDIN	53,172	(5,421)	6,743	(45,385)	321,560	638,351	410,304
9021904080	PARTS AND ACCESSORIES FOR PACEMAKERS FOR STIMULATI	0	(17,078)	(11,913)	(11,115)	(120,147)	(34,369)	(39,005)
9022120000	APPRTUS BASED USE OF X-RAYS FOR MEDICAL, SURGICAL,	5,831,106	19,832,102	15,381,752	9,809,516	11,501,977	37,235,945	7,801,739
9022130000	APPARATUS BASED ON THE USE OF X-RAYS FOR MEDICAL,	865,603	43,288	142,911	212,262	359,700	597,878	444,401
9022140000	APPARATUS BASED ON THE USE OF X-RAYS FOR MEDICAL,	16,635,598	55,339,261	39,221,004	86,533,841	53,621,607	46,951,902	45,426,373
9022190000	APPARATUS BASED ON THE USE OF X-RAYS FOR OTHER USE	15,307,643	11,956,572	1,588,778	7,083,589	11,350,218	8,943,879	25,183,681
9022210000	APPARATUS BASED ON THE USE OF ALPHA, BETA OR GAMMA	1,187,786	2,137,057	2,537,122	3,400,413	1,721,952	5,316,594	2,808,253
9022298000	APPARATUS BASED ON THE USE OF ALPHA, BETA OR GAMMA	522,272	1,130,473	1,326,116	1,438,207	2,598,144	3,613,980	5,933,261
9022300000	X-RAY TUBES	12,347,389	13,806,103	14,306,688	16,748,456	19,319,675	17,396,040	16,196,186
9022900500	RADIATION GENERATOR UNITS	(115,000)	(121,737)	(633,713)	(392,569)	(343,230)	(602,203)	(285,379)
9022902000	HIGH TENSION GENERATORS, CONTROL PANELS, DESKS, SC	205,893	1,415,557	891,344	1,285,599	1,100,919	1,424,736	1,670,379
9022904000	PARTS AND ACCESSORIES OF X-RAY TUBES	30,946	163,712	809,164	1,518,704	1,311,398	2,314,125	1,644,133
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## US Balances in Advanced Technology Products Trade With China

HS Code	Commodity Description	2000	2001	2002	2003	2004	2005	2006
9027202000	GAS CHROMATOGRAPHS	2,795,051	9,224,418	18,663,969	13,333,688	24,789,698	28,893,268	26,122,262
9027205030	ELECTRICAL ELECTROPHORESIS INSTRUMENTS	7,743,754	4,322,363	2,307,779	12,075,685	11,275,908	13,955,198	14,562,211
9027206050	LIQUID CHROMATOGRAPHS	2,483,174	5,826,219	2,928,865	4,208,858	9,417,574	9,585,937	15,172,724
9027209000	CHROMATOGRAPHS AND ELECTROPHORESIS INSTRUMENTS, NE	831,595	1,349,251	1,959,570	1,466,423	5,678,718	4,211,641	7,535,680
9027308020	SPECTROSCOPES, EXCEPT ELECTRICAL USING OPTICAL RAD	11,962	98,000	28,500	32,914	(2,200)	(15,930)	(57,500)
9027502000	THERMAL ANALYSIS INSTRUMENTS AND APPARATUS	5,658,894	7,295,587	5,009,652	9,364,380	9,986,157	16,240,569	14,152,516
9027504050	ELECTRICAL PHOTOMETERS USING OPTICAL RADIATIONS	137,494	205,765	492,181	(4,317,999)	335,651	1,541,762	3,091,457
9027505000	OTHER CHEMICAL ANALYSIS INSTRUMENTS AND APPARATUS,	3,118,475	6,192,805	8,257,681	9,354,527	26,012,654	30,377,451	36,467,460
9027509000	INSTRUMENT AND APPARATUS FOR PHYSICAL OR CHEMICAL	4,710,792	14,518,065	10,735,698	14,476,580	16,246,722	22,129,032	25,381,746
9027801000	NUCLEAR MAGNETIC RESONANCES INSTRUMENTS AND APPARA	754,792	2,011,568	1,087,232	1,618,768	1,669,127	1,845,107	1,714,784
9027802000	MASS SPECTROMETERS	2,390,008	9,648,647	13,023,075	17,287,049	24,649,466	24,312,372	42,532,955
9027803100	ELECTROCHEMICAL INSTRUMENTS AND APPARATUS,	3,375,744	3,919,593	4,178,334	5,516,584	3,800,214	7,274,024	8,463,641
9027803200	CHEMICAL ANALYSIS INSTRUMENTS AND APPARATUS, NESOI	7,045,117	13,885,599	13,298,146	11,504,593	11,182,382	14,652,071	14,344,912
9027808000	INSTRUMENTS AND APPARATUS FOR MEASURING/CHECKING V	11,433,152	14,259,497	14,868,447	20,812,677	20,638,755	18,788,123	22,471,345
9027902000	MICROTOMES	(342,441)	(628,988)	(534,612)	(113,689)	(387,496)	318,998	1,217,416
9027905430	PARTS AND ACCESSORIES OF ELETRICAL INSTRUMENTS AND	1,382,877	1,680,424	1,218,890	1,562,272	5,898,984	13,694,238	7,490,967
9027905440	PARTS AND ACCESSORIES OF ELETRICAL INSTRUMENTS AND	6,024	72,175	238,631	151,488	749,522	1,318,706	546,988
9027908950	PARTS AND ACCESSORIES OF INSTRUMENTS & APPARATUS F	13,331,096	32,627,936	28,975,006	38,937,226	34,610,219	51,460,986	67,698,928
9029206000	STROBOSCOPES	(2,094)	(73,512)	(9,723)	27,684	62,360	93,911	(311,426)
9030100000	INSTRUMENTS AND APPARATUS FOR MEASURING OR DETECTI	3,882,241	7,491,513	6,225,223	5,080,195	4,275,538	9,032,429	15,421,823
9030200000	CATHODE-RAY OSCILLOSCOPES AND CATHODE-RAY OSCILLOG	7,992,527	10,426,248	4,821,946	3,395,739	2,605,568	4,551,992	1,230,474
9030310000	MULTIMETERS	(10,043,072)	(5,785,424)	(9,217,403)	(19,000,000)	(36,662,076)	(44,747,977)	(50,613,810)
9030390040	APPARATUS TO TEST VOLTAGE OR CURRENT OR RESISTANCE	(4,564,596)	454,479	(3,660,667)	(2,612,084)	(4,015,282)	6,858,589	7,350,297
9030390080	OTHER INSTRUMENTS AND APPARATUS FOR MEASURING OR C	6,159,191	11,132,782	8,753,148	6,385,797	11,842,300	9,171,046	12,943,155
9030400000	OTHER INSTRUMENTS AND APPARATUS, SPECIALLY DESIGNE	14,123,866	65,099,585	37,940,926	33,535,843	54,762,687	37,181,130	36,428,521
9030820000	INSTR AND APPAR FOR MEASURING OR CHECKING SEMICOND	37,973,341	32,243,906	52,030,010	49,916,234	119,507,791	98,955,139	160,159,489
9030906400	PRINTED CIRCUIT ASSEMBLIES OF INSTRUMENTS AND APPA	(168,296)	(253,978)	(81,544)	(131,879)	(1,304,206)	(1,833,342)	(11,209,275)
9030906800	PRINTED CIRCUIT ASSEMBLIES EXCEPT FOR 9030.10,NESO	(1,268,782)	(1,736,098)	(1,187,826)	(1,632,913)	(5,967,315)	(4,740,122)	(11,835,588)
9031410000	OPTICAL INSTRUMENTS FOR INSPECTING SEMICONDUCTOR	18,290,773	34,282,128	52,845,847	45,908,594	110,000,000	76,832,966	116,449,020
9031410020	OPTICAL INSTRUMENTS AND APPLIANCES FOR INSPECTING	(4,000)	(6,000)	(9,796)	0	0	(8,295)	0
9031410040	OTHER OPTICAL INSTRUMENTS AND APPLIANCES FOR INSP	(200,000)	0	(10,438)	(14,417)	(383,365)	(419,103)	(13,737)
9031410060	OPTICAL INSTRUMENTS AND APPLIANCES FOR INSPECTING	(6,900)	(21,497)	(24,786)	(184,745)	(20,148)	(117,875)	(282,642)
9031494000	COORDINATE-MEASURING MACHINES	(3,590)	(4,800)	5,024,440	8,556,434	11,514,113	14,908,980	17,489,173
9031804000	ELECTRON BEAM MICROSCOPES FITTED WITH EQUIPMENT SP	0	(105,604)	(38,396)	(101,127)	(17,227)	0	(616,900)
9031808060	EQUIPMENT FOR TESTING ELECTRICAL CHARACTERISTICS O	4,242,761	4,103,021	3,961,004	7,772,396	10,251,483	13,861,568	11,288,827
9031900000	PARTS & ACCESSORIES OF MACHINES, NESOI IN THIS CHA	8,400,624	11,841,611	16,479,613	19,491,653	33,997,118	38,124,726	44,010,867
9032100000	THERMOSTATS	2,440,796	905,505	2,140,878	4,456,426	5,408,525	5,154,223	3,144,448
9032100030	THERMOSTATS, AIR COND, REFG/HEATING SYS WALL MOUNT			(30,000,000)	(43,000,000)	(67,255,379)	(94,310,255)	(98,833,747)
9032100060	THERMOSTATS AIR COND, REFG/HEAT SYS EXC WALL MOUNT			(6,732,072)	(11,000,000)	(14,416,809)	(15,847,604)	(19,141,983)
9032100090	THERMOSTATS, NESOI			(17,000,000)	(20,000,000)	(23,396,098)	(32,515,426)	(40,165,194)
9032810040	HYDRAULIC OR PNEUMATIC INDUSTRIAL PROCESS CONTROL	606,870	901,493	2,705,515	715,234	3,647,238	3,868,859	4,689,935
9032810080	HYDRAULIC AND PNEUMATIC INSTRUMENTS AND APPARATUS	741,799	1,128,207	1,515,314	797,363	763,336	873,195	3,502,075
9032893000	AUTOMATIC VOLTAGE AND VOLTAGE-CURRENT REGULATORS	905,595	615,705	8,346,381	2,541,343	3,288,352	2,245,195	5,483,743
9032896020	CONTROL INSTRUMENTS FOR AIR CONDITIONING, REFRIGER	1,524,808	2,597,414	5,109,760	6,163,238	5,734,321	7,259,627	12,293,485
9032896030	PROCESS CONTROL INSTRUMENTS AND APPARATUS FOR COMP	7,498,034	10,965,956	7,560,332	10,381,311	11,612,475	6,866,415	7,962,657
9032896040	PROCESS CONTROL INSTRUMENTS AND APPARATUS FOR TEMP	(3,021,779)	(3,005,545)	(15,000,000)	(12,000,000)	(2,245,795)	1,593,703	(9,087,770)
9032896050	PROCESS CONTROL INSTRUMENTS AND APPARATUS FOR PRES	46,313	466,996	837,569	927,346	2,834,427	5,156,649	7,930,677
9032896060	PROCESS CONTROL INSTRUMENTS AND APPARATUS FOR FLOW	(1,065,395)	(1,710,548)	442,204	(3,475,577)	(14,906,159)	(5,464,468)	1,790,186
9032896070	PROCESS CONTROL INSTRUMENTS AND APPARATUS FOR HUMI	(2,931,245)	(398,855)	(1,281,212)	(578,542)	(1,813,575)	(1,819,557)	(179,331)
9032896075	OTHER PROCESS CONTROL INSTRUMENTS AND APPARATUS, N	4,520,729	5,963,891	11,128,366	15,584,500	4,142,560	(781,652)	(1,750,641)
9301200000	ROCKET LAUNCHERS & SIMILAR PROJECTORS (MIL)			0	8,296			
9304002000	RIFLES WHICH EJECT MISSILES BY RELEASE OF COMPRESSE	(2,017,581)	(2,338,181)	(2,355,568)	(1,684,927)	(3,791,067)	(8,549,083)	(22,036,068)
9304006000	OTHER ARMS, EXCLUDING THOSE OF HEADING 9307, NESOI	(281,599)	(476,369)	(372,816)	(758,443)	(850,898)	(1,175,701)	(1,793,152)
9305108000	PARTS AND ACCESSORIES OF REVOLVERS AND PISTOLS, NE	0	(22,769)	(179,050)	(716,918)	(568,292)	(970,430)	(1,761,327)
9305905000	PARTS AND ACCESSORIES FOR ARTICLE OF SUBHEADING 93	(690,427)	(362,777)					
9305995000	PARTS FOR SUBHEADING 9304.00.20 OR 9304.00.40			(2,082,184)	(4,616,903)	(4,333,326)	(4,036,280)	(11,538,345)
9306308000	PARTS OF CARTRIDGES, NESOI	(2,725)	55,130	20,952	20,107	(134,387)	20,739	(372,699)
9306900020	GUIDED MISSILES					0	36,600	0
9306900040	BOMBS, GRENADES, TORPEDOS, & SIML MUNITIONS OF WAR			(16,314)	(38,088)	(67,668)	(67,643)	(333,248)
9306900060	PARTS FOR GUIDED MISSILES	1,044,620	22,880	0	0	4,575,250		
9306900080	PARTS FOR BOMBS, GRENADES, & SIML MUNITIONS OF WAR					(33,213)	(15,155)	(23,119)
9810006000	INST & APPRPTS NT MFRG IN USA FOR NONPROFIT INST		0	(35,085)	(29,972)	(40,000)	(21,840)	(122,763)

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