

# MANUFACTURING & TECHNOLOGY NEWS

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## New Law Toughens Penalties On Counterfeiters

**President Bush on March 16 signed the Stop Counterfeiting in Manufactured Goods Act (H.R. 32), a law aimed at shutting down worldwide trafficking in fake merchandise, which has swollen in volume to an estimated half-trillion dollars per year.**

Passed in the House on a voice vote and in the Senate by unanimous consent, the legislation enjoys support among industry groups across a wide variety of sectors. One of its backers, the Coalition Against Counterfeiting and Piracy (CACAP), includes more than 130 businesses and associations under the auspices of the U.S. Chamber of Commerce and the National Association of Manufacturers (NAM).

"We need this [law] right away," declares David Peyton, NAM's director of technology policy, saying it addresses "a top-level issue across all of industry." Counterfeiting, he adds, "is no longer just watches and handbags — we've got a dozen or more major sectors that have a big problem. It's almost easier to run down a list of industry sectors that don't have such problems. The World Customs Organization and Interpol estimate that annual global trade in illegitimate goods has skyrocketed from \$5.5 billion in 1982 to a projected \$600 billion for 2006.

The House report accompanying H.R. 32 cites U.S. auto industry figures indicating that fake parts

BY KEN JACOBSON

"comprise a \$12-billion global problem — \$3 billion in the U.S. alone," and adds: "The Department of Commerce estimates that the U.S. auto industry could hire over 200,000 more workers if the counterfeit auto parts trade disappeared."

The new law will beef up federal enforcement in several ways:

- It outlaws producing and dealing in "counterfeit marks" such as labels, wrappers, containers and documentation that are "likely to cause confusion, to cause mistake, or to deceive" — even when they are "not attached to the [fake] goods," says the new law. And it extends to this offense current penalties for trafficking in counterfeit goods, which are stiff: for individuals, 10 years' imprisonment and a \$2-million fine for a first offense; 20 years and \$5-million for a repeat offense.

This provision is critical to closing "the import hole," Peyton explains. Without this change, no one risks prosecution when counterfeiters abroad "manufacture shoddy stuff — batteries, pills, anything — that comes into the U.S. unlabeled in

*(Continued on page four)*

## China Trade Will Boost U.S. Wealth, Argues China Council

The huge trade imbalance with China is a good thing, not a bad thing, even though trade with China will lead to the direct loss of an additional 500,000 manufacturing jobs by 2010, argues the U.S.-China Business Council, a trade group made up primarily of large companies doing business in China.

"The long-term benefits to the United States of trade with China are substantial and likely to endure," states the group in a 28-page assessment of the benefits of trade with China

The projected loss of 500,000 manufacturing jobs in "sensitive" industrial sectors over the next four years will be made up by the gain of 500,000 service sector jobs. "While this structural shift displaces some workers in manufacturing sectors and thus represents a real cost to workers in those sectors, the economy as a whole will benefit from permanent output and price effects of increased trade with China," the U.S.-China Business

*(Continued on page eight)*

# Republicans In Congress Prefer Not To Deal With Doctored Commerce Dept. Report On Outsourcing

In the latest chapter of a controversy surrounding a Commerce Department report on the offshoring of U.S. high-tech jobs, the 20 Democratic members of the House Science Committee on March 9 introduced a Resolution of Inquiry (H.Res. 717) that would require Commerce Secretary Carlos Gutierrez to provide the House with a copy of the report's final draft.

But the measure seems doomed from the outset, as Science Committee Chairman Sherwood Boehlert (R-N.Y.) this week indicated to *MTN* through a spokesman that he "intends to oppose the resolution" when it comes before his panel.

A Resolution of Inquiry, once referred to a committee, must be reported out within 14 legislative days — although the panel has the option of reporting it favorably, unfavorably or without recommendation. "The committee will schedule a markup within the 14-day window that the House requires," said David Goldston, the committee's chief of staff.

But, explaining the Republican majority's opposition, he added: "We don't believe there is any live issue of consequence to pursue here. The folks at the top of TA [the Technology Administration] are gone, and the report itself has been superseded by the report of NAPA [the National Academy of Public Administration]."

TA was tasked with drafting the report, for which \$335,000 was reserved in the Commerce Department's fiscal-year 2004 appropriations. NAPA is currently working under a subsequent \$2-million mandate from Congress to produce a more extensive study of the subject; in January it issued the first of three projected installments (*MTN*, Jan. 19, p. 6).

The Commerce Department's

report, although dated July 2004, surfaced only in September 2005, six months after *MTN* requested it under the Freedom of Information Act. And that 12-page document, according to Science Committee Democrats, bore little resemblance to the draft of "nearly 200 pages in length" that they allege had been produced by TA analysts "between January and June 2004."

Several of the Democrats, led by Rep. Bart Gordon (D-Tenn.), the committee's ranking minority member, have been "trying to obtain a copy of the full report since May of 2005," they said in a statement. Most recently, they sent requests to Boehlert and to Rep. Vernon Ehlers

(R-Mich.), the chairman of the House Science Subcommittee on Environment, Technology & Standards, to join them in asking Gutierrez for the draft.

The participation of a committee or subcommittee chairman would have given the Democrats' request for the document the status of an official congressional request, which it has not enjoyed coming from individual members. Neither Boehlert nor Ehlers was willing to co-sign their minority colleagues' letters.

While the panel's Democrats posit White House involvement in the report's handling — "What is this Administration hiding?" Gordon asked in a recent statement — GOP members place the responsibility at the level of TA.

Their position that, as Goldston put it, there is nothing more in the issue to "merit the committee's attention," is linked to the departure in recent months of political appointees who held key TA posts during the report's production and much of the subsequent controversy.

— **KEN JACOBSON**

## *New Standards For Social Responsibility*

The American Society for Quality (ASQ) is launching the development of a global corporate standard on social responsibility with a projected publication in fourth-quarter 2008. Interviewing 100 officials of Fortune 500 companies and ASQ corporate members, ASQ found that while 96 believe "having a social responsibility policy is important to the future of the U.S. economy," only 60 "have some formal social policy in place."

The remaining 40 "don't have any plans to implement" one, even though only 22 of the 100 polled "feel social responsibility programs would not make any difference [to improving corporate performance] or would be a waste of time and money."

Asked how their organizations define social responsibility, executives most frequently said: "Acting in an honest and ethical manner with employees, customers and the community — locally, nationally and globally"; "doing the right thing for the right reasons and not for short-term gain"; "open communication"; "integrity"; "ethical behavior"; or "business values."

As to the effects of a social responsibility policy, two-thirds of the respondents said maintaining brand image was the highest-impact benefit. Other top benefits were employee morale, cited by 61; reduced legal liability, 60; attraction and retention of employees, 52; and increased revenue, 37.

ASQ attributes executive concern to the corporate scandals of recent years, which "has shed light on the need for corporate responsibility policies."

ASQ is inviting experts from both the public and private sectors to join its U.S. Technical Advisory Group (TAG) on Social Responsibility and take part in developing the standard, intended to "provide guiding principles and direction for those companies that recognize the strong connection between results and responsibility." More information is available online at [www.asq.org/social-responsibility](http://www.asq.org/social-responsibility).

# Trade Deficit Leads To Loss Of Many Jobs

The trade deficit in goods in 2005 of \$782 billion displaced 757,000 jobs, according to an analysis by economist Charles McMillion of MBG Information Services. With an accumulated deficit of \$4.6 trillion since 1993, 6.4 million jobs have been displaced, a figure that is based upon data from the Commerce Department's "U.S. Jobs from Exports" report (located at [http://www.ita.doc.gov/td/industry/otea/job\\_report/Job\\_Report\\_Hardcopy.pdf](http://www.ita.doc.gov/td/industry/otea/job_report/Job_Report_Hardcopy.pdf)).

This 2001 report calculates that 11,576 jobs were required for each \$1 billion in manufacturing production. Adjusted for productivity growth, McMillion calculates that 8,200 jobs were required for each \$1 billion in manufacturing production in 2005.

The vast majority of the jobs lost have been replaced by lower paying jobs in industries that do not face global competition, such as the restaurant, construction, education and health care industries.

"The trade data suggest that the rapidly worsening net import imbalance with China accounts for more than one-third (-277,000) of the trade-related job displaces in 2005 and for roughly one-quarter (-1.65 million) of total trade displaced jobs," says McMillion. The trade deficit with China, which increased from \$162 billion in 2004 to \$202 billion in 2005, now totals more than \$1 trillion since 1995.

For 2005, the trade deficit in goods reached \$782 billion, up from \$665 billion in 2004. The surplus in services was \$58 billion.

## Here are selected statistics from the Census Bureau's tally of the January 2006 trade account:

- The January goods and services deficit (\$68.5 billion) and the January goods deficit (\$73.4 billion) were records. The goods and services deficit was up \$10.2 billion from the same month in 2005.
- January exports of goods and services (\$114.4 billion) and January exports of goods (\$81.7 billion) were records.
- January imports of goods and services (\$182.9 billion, up by \$6.2 billion from December) and January imports of goods (\$155.1 billion) were records.
- January exports of services (\$32.7 billion) and January imports of services (\$27.8 billion) were records.
- The January deficit in goods (\$72.1 billion) was a record.
- The January non-petroleum deficit (\$49.6 billion) was a record.

### Exports:

- January exports of \$82.6 billion were a record.
- January exports of industrial supplies and materials (\$21.1 billion); capital goods (\$33.2 billion); and automotive vehicles, parts, and engines (\$9.1 billion) were records.
- January exports of foods, feeds, and beverages (\$5.4 billion) were the second highest on record. The record (\$5.4 billion) occurred in May 2005.
- January exports of consumer goods (\$10.4 billion) were the second highest on record. The record (\$10.6 billion) occurred in December 2005.

### Imports

- January imports of \$154.8 billion were a record.

- January imports of foods, feeds, and beverages (\$6.4 billion); industrial supplies and materials (\$50.3 billion); capital goods (\$34.1 billion); automotive vehicles, parts, and engines (\$22.7 billion); and consumer goods (\$36.2 billion) were records.

### Goods By Category:

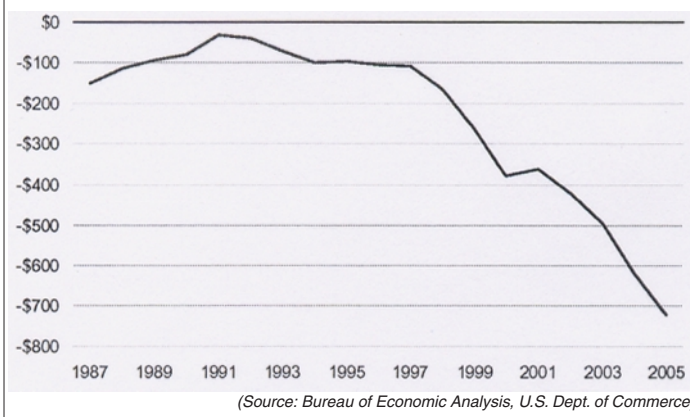
- The December to January change in exports of goods reflected increases in industrial supplies and materials (\$1 billion); capital goods (\$900 million); foods, feeds, and beverages (\$500 million); and automotive vehicles, parts, and engines (\$100 million). Decreases occurred in consumer goods (\$100 million) and other goods (\$100 million).
- The December to January change in imports of goods reflected increases in industrial supplies and materials (\$1.4 billion); capital goods (\$1.2 billion); automotive vehicles, parts, and engines (\$1.2 billion); consumer goods (\$1 billion); other goods (\$600 million); and foods, feeds, and beverages (\$400 million).
- The January 2005 to January 2006 change in imports of goods reflected increases in industrial supplies and materials (\$12 billion) capital goods (\$3.1 billion) automotive vehicles parts and engines (\$2.8 billion), consumer goods (\$1.9 billion), and foods, feeds and beverages (\$800 million).

Advanced technology products exports were \$18.3 billion in January and imports were \$21.7 billion, resulting in a deficit of \$3.4 billion.

### Country and other highlights

- The January deficit with Canada (\$8.9 billion) was a record.
- January imports from Canada (\$26.2 billion) were the second highest on record. The record (\$26.9 billion) occurred in October 2005.
- The January deficit with the European Union (\$9.7 billion) was the lowest since April 2005 (\$9.3 billion).
- The goods deficit with China increased from \$16.3 billion in December to \$17.9 billion in January. Exports decreased \$0.7 billion (primarily civilian aircraft and semiconductors) to \$3.5 billion, while imports increased \$0.9 billion (primarily other household goods and apparel) to \$21.4 billion.

Balances On Goods And Services Trade  
(In Billions of Dollars)



## Counterfeiting Act...*(Continued from page one)*

bulk, and then in some sequestered location here is wrapped, labeled and passed off.”

- It requires not only that counterfeit marks be destroyed — just as counterfeits must be under current law — but also that, in the report’s words, “any property derived, directly or indirectly, from the proceeds of the violation as well as any property used or intended to be used in relation to the offense” be forfeited.

Authorities can now seize only the inventory and cannot seize any other asset such as shrink-wrapping equipment or PCs. As a result, “those go back into use again,” says Peyton. The new law extends protections “already enjoyed by copyright and trade secret holders” to holders of trademarks, says the legislation.

- Closing another loophole, the new law “clearly specifies that it is illegal to give away counterfeit goods in exchange for some future benefit” — that is, to barter — according to a summary from the Motor and Equipment Manufacturers Association. That organization, which represents 700 motor vehicle product makers with 830,000 U.S. workers, has been particularly active in lobbying for H.R. 32’s passage, as have been makers of electrical equipment.

- It strengthens the hand of U.S. trade negotiators, who, the report observes, have been prevented from “seeking stronger anti-counterfeiting enforcement provisions in bilateral or multilateral agreements” because of the fact that federal law has been “simply inadequate for domestic enforcement purposes.”

NAM’s Peyton stresses the significance of “criminalizing the export of counterfeit goods” from the U.S. even though the practice is far less common here than in many other countries. “USTR is not prepared to negotiate for things that we’re not doing ourselves, so we had to fix our own infirmities first,” he says.

With H.R. 32 on the books, anti-counterfeiting forces will be keeping an eye on the progress of the proposed Intellectual Property

Rights Enforcement Act (S. 1984), which would bring numerous federal agencies into a new Intellectual Property Enforcement Network under the chairmanship of the Office of Management and Budget. This network would include representatives from the departments of Justice, Treasury, Commerce, State and Homeland Security, as well as from the USTR and CIA. It would have two responsibilities: “establishing policies, objectives and priorities concerning international property protection and intellectual property law enforcement” and “protecting United States intellectual property

rights overseas.”

The bill, introduced in the Senate in November and still lacking a House counterpart, is meant to consolidate efforts that have been spread over the National Intellectual Property Law Enforcement Council (NIPLEC), a statutory body, and an interagency initiative known as the Strategy Targeting Organized Piracy (STOP).

NIPLEC “hasn’t been terribly effective,” according to Peyton, while STOP has lacked statutory backing. The thrust of S 1984, he says, is to “address a situation in which the statutory body has little action and, where the action is, [there’s no] real statutory backing.” It also aims to “bring in Treasury because of its expertise in money-laundering.”



President Bush signs H.R. 32, the Stop Counterfeiting in Manufactured Goods Act, during ceremonies Thursday, March 16, 2006, in the Eisenhower Executive Office Building. Looking on are, from left: Commerce Sec. Carlos Gutierrez; Labor Sec. Elaine Chao; Attorney General Alberto Gonzales; Rep. Jim Sensenbrenner (R-Wisc.); Rep. Joe Knollenberg (R-Mich.) and Rep. Bobby Scott (D-Va.). *White House photo by Kimberlee Hewitt*

## PTO Conference On Manufacturing Abroad

The United States Patent and Trademark Office is holding a two-day conference on intellectual property aspects of companies wanting to manufacture their products abroad. The March 27 - 28 event at the Ritz-Carlton in McLean, Va., will provide companies with the steps they need to take to protect their patents, trade secrets, trademarks and copyrights from unfair competition, counterfeiting, infringement and piracy. The conference is part of the federal government’s Strategy Targeting Organized Piracy (STOP) program. For information on the event, go to <http://www.uspto.gov>.

# China's Trademark Office Rules Against Leupold's Claim For The 'LEUPOLD' Mark

China's disregard for upholding its numerous international commitments to intellectual property rights is presenting yet another frustrating struggle for a U.S.-based manufacturer.

Leupold & Stevens, the Beaverton, Ore.-based maker of riflescopes, binoculars, rangefinders and spotting scopes under the "Leupold" trademark, learned in December 2001 that the Chinese government had issued a trademark for the English word "LEUPOLD" to a company it had never heard of: SAM Optics Ltd. of China.

To counter SAM Optics' application, Leupold and Stevens filed its own trademark application with the People's Republic of China on Jan. 21, 2002. It learned in November 2005 that its application for the "LEUPOLD" trademark in China was rejected by the PRC Trademark Office on grounds that it did not own a registration or application for the mark "LEUPOLD" in China, company representative Andrew York told the Senate subcommittee on trade, tourism and economic development on March 8. The Chinese Trademark Office also said that Leupold & Stevens' "demonstration of trademark registrations, sales and manufacturing volume, and affidavits of fame of the mark, were insufficient to prove that SAM Optics had filed in bad faith," said York. "This is the kind of experience that awaits U.S. businesses seeking to register their trademarks in China."

Leupold & Stevens is filing an appeal, but the company's counsel does not expect the PRC Trademark Office to rule for at least two to three years. "If Leupold & Stevens loses this final appeal and if it loses its opposition against [SAM Optics] for the LEUPOLD mark owned by Sam Optics, Leupold & Stevens will have no recourse except either to pay whatever price SAM Optics sets for the registration it has obtained in bad faith or run the risk of being prosecuted for infringement of its own mark registered in China by SAM Optics," said York. "This is obviously just the type of fraudulent intent that numerous international conventions, agreements and treaties have sought to prevent."

China is a member of the World Intellectual Property Organization and the Paris Convention for the Protection of Industrial Property. It acceded to the Madrid Agreement for International Registration of Trademarks in 1989; the Nice Agreement for the International Classification of Goods and Services in 1994; and it signed the Trademark Law

Treaty in 1994.

But for Leupold and Stevens, a 99-year-old manufacturer, none of those treaties matter. China interprets its involvement in these conventions however it pleases, said York. "What is possibly needed is stricter wording in these international agreements that treaty provisions take precedent

over domestic trademark provisions and these treaty provisions must be incorporated exactly as enacted in the signed agreements," he said.

Shortly after SAM Optics filed its application in 2002 for the "LEUPOLD" mark, Leupold and Stevens started to do some research on the company. It found that SAM Optics had filed to register applications for 16 other companies' trademarks, most of which were in the sports optics and telescope market, including for the biggest names in the business: Bushnell, Swift, Celestron, Swarovski and others. "We later learned from our counsel that SAM Optics sold one of the marks for somewhere between \$50,000 and \$80,000," York told the subcommittee.

"It is clearly not ethical or acceptable that SAM Optics runs out and files trademarks in China for 19 well known international brands of optical equipment with the sole intent being to extort a ransom from those companies, to purchase back trademarks which those companies rightfully own by internationally accepted trademark standards," York said. "Furthermore, it is absolutely not acceptable that China, having agreed to these international standards, fails to implement them into law or to correctly apply those trademark laws which it has implemented. How can it be that after all of the work that has gone into setting these international standards that Leupold and Stevens Inc. cannot register and protect the LEUPOLD trademark in China, even in the face of such a case of pure fraudulent intent by SAM Optics?"

## China Will Develop Civilian Jetliners

China has announced plans to re-start its program to develop large commercial aircraft. Premier Wen Jiabao said on March 5 that China intends to start producing aircraft that can seat 150 passengers with a 4,000-mile range by the end of 2010, according to a report in Asia Times. Air travel in China has increased by 95 percent in the past five years, and the country has become the world's second largest civil aviation market. Boeing estimates that China will need more than 2,600 new aircraft in the next two decades, worth \$213 billion.

"It is estimated that about one quarter of Airbus airliner parts and a third of Boeing airliner parts are manufactured in China," says Asia Times.

China is also building its own regional jet (the ARJ21), which is currently undergoing test flights and will be put in service in 2008. There have been 41 orders for that aircraft, which has a capacity of between 70 and 90 passengers.

The country is also producing the Xinzhou60 (MA60), a medium-sized turboprop manufactured by the Xi'an Aircraft Industrial Corp. One MA60 was delivered to Zimbabwe last year and an additional 20 are on order from foreign countries including Fiji, Zambia and Nepal. The MA60 has a passenger capacity of about 60 and a range of 1,600 kilometers.

# Tactics Need To Change To Force China To Uphold Intellectual Property Rights, Argues Harvard Law Prof

The long-standing tactic of the U.S. government using pressure and jawboning China to enforce intellectual property rights laws isn't working and won't work for a long time to come, says a Harvard law professor with decades of experience dealing with China's legal system. "We would be mistaken if we think that if we bring enough pressure to bear, we can effect the type of change we would like to see," says William Alford, director of East Asian Legal Studies at Harvard Law School.

A different tact must be taken in order for China to start abiding by its own laws and the many international intellectual property rights treaties to which it has signed.

The biggest problem with China's conformance to protecting intellectual property is the widespread notion among its population that doing so only helps foreign entities. "Western ideas of intellectual property rights were introduced early in the 20th century," Alford explains. "Unfortunately, much of what was introduced then was done via threats and intended chiefly to protect foreign property, which has meant that it was and, to some degree, continues to be, readily associated in many Chinese minds with foreign impositions rather than understood as useful for China's own development," Alford told a recent hearing of the Senate Commerce Committee's subcommittee on trade, tourism and economic development. It was not until the end of the Cultural Revolution in the 1980s that intellectual

property rights issues were even addressed, "and for many citizens these remain novel ideas."

Moreover, there is not the institutional legal infrastructure in place throughout the country to enforce intellectual property rights. China's National Copyright Administration still only has 200 people on staff dealing with enforcement issues nationwide.

China's centralized form of government also doesn't help. "Intellectual property protection flourishes in states that nurture free expression and free association," says Alford. "I doubt that we — even working with our allies — possess sufficient pressure to get the Chinese authorities to embrace policies that they otherwise would not be inclined to follow and which, in any event, they still lack the institutional infrastructure fully to carry out."

For now, the best way for the United States to affect change is "to promote better and broader public understanding in China of rights generally and to help build better institutions — even as we appreciate that these entail long-term processes and that their ultimate shape will (and should) rest primarily with the Chinese people," says Alford. "This means not only working to educate people about intellectual property rights, but about rights more generally, for it seems unrealistic to expect that people will heed complex abstract rights of foreigners if they are not accustomed to asserting their own fundamental rights.

"This also means that there ought to be more support from

our government and from private sources alike for programs that foster the development of legal institutions and the growth of civil society...Contrary to conventional wisdom, a greater attention on the part of the business community to issues of human rights is likely to advance rather than impede the realization in China of important economic objectives such as greater protection for intellectual property rights."

A strong civil society, in which people feel the need to protect their private interests, will lead to stronger intellectual property protection, says Alford. "We are seeing early evidence of this in China," he says. "As civil society and private business have started to emerge, we are seeing the beginnings of a domestic constituency with valuable intellectual property and other interests of their own to protect...Indeed, in 2004, some 95 percent of infringement litigation was initiated by PRC plaintiffs."

The United States should also realize that there are risks associated with China's success. "We do need to appreciate that the very same economic changes that are nurturing potential allies also have the potential to make them strong future competitors," Alford concludes, citing a *Chemical Week* story in which Ian Harvey of the Intellectual Property Institute in London says: "China is on the verge of becoming a major technology and IP generator, creating a tidal wave of patents likely to wash over the U.S. and Europe's shores in the next decade, enabling China to dominate significant technology areas. Indeed, we are already beginning to see Chinese companies thinking about how to use intellectual property law, antitrust law, their economic power and the assistance of the state to protect and advance their own interests against leading foreign companies as well as domestic competitors at home and even abroad."

# Council On Competitiveness Initiates Program To Keep America In The Mfg. Game

The Council on Competitiveness last week took the first step toward a prospective "major initiative" on the future of manufacturing in the United States. The group convened a subset of its Strategy Council to kick off action on what the body sees as an immediate "priority" for its members.

Brainstorming at the council's Washington, D.C., headquarters for several hours on March 8 was a select group of 25 drawn from both the public and private sectors that included Al Frink, the assistant secretary of Commerce for Manufacturing & Services; Bill Jeffrey, director of the National Institute of Standards and Technology; and executives from such companies as Procter & Gamble, Intel, Timken and Eastman Kodak.

"The meeting was a brainstorming session to begin the process of better understanding the role of manufacturing in the American economy and what the future might hold," says council president Deborah Wince-Smith. "We are on the cusp of a technological renaissance in advanced manufacturing with the emergence of desktop fabrication, touch-sense-feel process controls, production slicing, nanoscale manipulation of matter, and the acceleration and transformation of product development through high-performance computing tools that will radically change the move from mass production to mass customization."

Among the questions the council is addressing, according to Chad Evans, its vice president for the National Innovation Initiative (NII), are: "Why are U.S.-based manufacturers investing overseas and not here?" And, "if that's the case, what would they need from the public sector to think about investing in this country in new plants and processes? Is it just a cost issue, or are there other drivers as well?"

The gist of the matter, Evans stressed, is that new U.S. investments, whether in the public or the private sector, "really ought to be focused on the future of manufacturing" — on technologies that might produce "future job growth or new industries" — rather than on "financing and supporting industries that are going to be increasingly commoditized."

Innovate America, the NII's December 2004 report, phrased it this way: "We must put aside the growing perception that America will

inevitably lose its manufacturing edge. Instead, we should begin to design and implement a new foundation for high-performance production. This means deploying new manufacturing technologies as fast as they become available. It means integrating new designs, processes and materials in a modular fashion. It means adopting new human, organizational, financial and policy models for a robust future for manufacturing in America."

The discussion will not be limited to the problems of big companies. "The challenges and opportunities facing small- and medium-sized enterprises probably are different," says Evans. "How we address that is something we've got to think about." The council will be "tapping a couple of private-sector leaders to help craft a project paper that we can start circulating among our members to get further engagement," says Evans.

## Uptick In VC Funding For New Firms

U.S. venture-capital funding for enterprises in the "startup/seed" category jumped nearly 45 percent last year, to \$735.9 million in 2005 from \$406.6 million in 2004. But they still lagged well behind \$3-billion-plus levels for that category in 1999 and 2000, according to figures from the National Venture Capital Association (NVCA).

Although the 2005 startup/seed figure was by far the highest since 2001's \$729.5 million, its distribution was more densely concentrated, spread over 175 deals last year as opposed to 258 in 2001. And it remained only a small percentage of total venture funding, which was steady at nearly \$21.7 billion in both 2004 and 2005.

Meanwhile, the past two years have seen a significant shift of funding into later-stage ventures from the expansion category. Later-stage funding has grown from \$5.7 billion in 2003 — when overall venture-capital investment was at \$19.7 billion — to \$8 billion in 2004 and \$9.7 billion last year; expansion funding has fallen, from \$10.1 billion in 2003 to \$9.3 billion in 2004 and \$7.8 billion last year.

More results from the survey are available online at [http://www.nvca.org/pdf/Moneytree05\\_Q4FinalRelease.pdf](http://www.nvca.org/pdf/Moneytree05_Q4FinalRelease.pdf).

## Job Opportunities At China Commission

There are four job openings on the staff of the U.S.-China Economic and Security Review Commission. The congressional commission is seeking two security and military policy analysts, and two economic and trade policy analysts. The job descriptions are located at the "Job Opportunities" link at <http://www.uscc.gov>.

Meanwhile, the commission has a new commissioner. Daniel Blumenthal, resident fellow in Asian Studies with the American Enterprise Institute in Washington, D.C., was appointed to the commission by Senate Majority Leader Bill Frist for a two-year term expiring at the end of 2007. Blumenthal served as senior director for China, Taiwan and Mongolia in the Office of the Secretary of Defense for international security affairs during the first Bush administration. He received an M.A. from the Johns Hopkins School of Advanced International Studies and a J.D. from the Duke University School of Law in 2000, and has studied Chinese language at Middlebury College and the Capital Normal University in Beijing.

## China Council...*(From page one)*

Council argues. "The overall impact should be a continuing and increasing positive boost to U.S. output, productivity, employment and real wages."

China is making Americans wealthier by saving them money — lots of it, says the council. By 2010, the United States GDP will be 0.7 percent higher due to trade with China; prices will be 0.8 percent lower, resulting in an increase of \$1,000 in real disposable income per U.S. household per year. That amount will constitute 1.9 percent of median (or 1.5 percent of average) annual family income in 2010.

The China effect will also force greater improvements in U.S. manufacturing productivity, argues the council. "Increased competition [will] cause the least productive manufacturing firms to close or to increase their productivity to compete with imports from China," says the report entitled "The China Effect: Assessing the Impact on the U.S. Economy of Trade and Investment With China."

Trade with China will boost productivity by 0.3 percent per year by 2010. "This higher productivity is the result of price effects, which allow U.S. firms that source some of their inputs from China or from other countries competing with China, to benefit from lower costs," says the council. "While improvements in economic efficiency are often associated with painful dislocations in certain sensitive industrial sectors, in the end, everybody benefits. Thus, the costs that we identify tend to be transitory and sector-specific, while the benefits tend to be permanent and distributed across the economy as a whole."

Displaced workers might not agree with the council's harsh assessment of their fate, but that's to be expected, says the U.S.-China Business Council. "The people whose jobs are at stake in those sectors are likely to consider the long-term benefits to the entire economy much less important to them personally," says the report, prepared by Oxford Economics and The Signal Group. "That trade-off between temporary or sector specific costs and permanent whole-economy benefits, is at the core of the policy debate in the United States and elsewhere on this issue. This trade off involves a value judgment that is beyond our purview as economists."

The U.S.-China Business Council notes that China's export machine is growing at a thunderous rate. Between 1990 and 2004, the volume of Chinese exports increased by 850 percent. During the same period, its share of world trade in manufactured goods rose from 2 percent to 11.5 percent.

The U.S.-China Business Council report uses Chinese government figures when it argues that China's imports are rising at the same level as exports. It states that the strong growth of imports into the country has tempered China's overall trade surplus, which amounted to \$110 billion in 2004. But that isn't the figure that China's trading partners report. When the China Currency Coalition added up the trade figures from China's major trading partners, it found that China's surplus was more like \$435.5 billion.

China has been unfairly singled out as being the primary cause of America's trade problems, says the

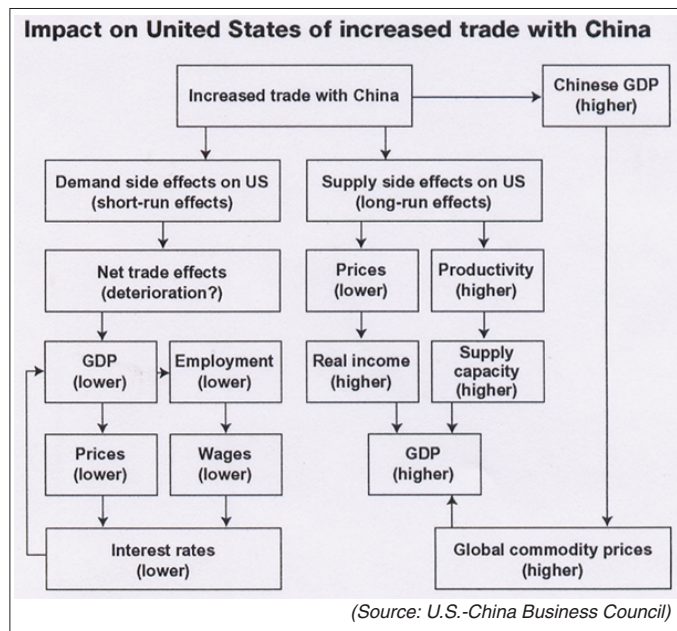
council. "Part of the explanation of the increase in the overall U.S. current account deficit is that U.S. exporters are losing market share everywhere, not just in China," it notes. "It is important to consider the bilateral U.S.-China trade position in the context of the overall U.S. current account position, which has also deteriorated rapidly in recent years....It is far from clear that the story of the overall U.S. trade deficit is really a story about trade with China, as much as the media commentary seems to suggest. If anything the reverse seems to be true. The growing bilateral U.S.-China trade imbalance certainly plays its part in the overall picture, although the deterioration in the trade deficit with China has come at the expense of other East Asian exporters to the United States...Since 1992, the bilateral deficit with China [using Chinese government trade statistics] has constituted a roughly constant share of the total U.S. merchandise trade deficit."

The U.S. trade deficit can be attributed in large part to the unwillingness of Americans to save, says the council report. "The United States as a whole wants to borrow at a time when the rest of the world...wants to save. The result is a current account deficit in the United States with all countries, including China."

The value of China's currency has little to do with the trade imbalance, the U.S.-China Business Council argues. "Chinese exporters to the United States are likely to do their best to protect their market share in the event of an exchange rate revaluation, even if that means cutting their profits and/or squeezing their costs, including labor costs," says the council. "As a result, the RMB revaluation is unlikely to have much impact on the dollar price of U.S. imports from China. U.S. exporters to China would benefit, as they would enjoy greater profits or a chance to increase their market share, but since U.S. exports to China are small compared to U.S. imports from China, the impact of higher exports on the bilateral deficit would be marginal."

The council predicts that trade with China will continue

*(Continued on next page)*





# Guest Editorial: The U.S.-China Business Council Has It Wrong

The U.S.-China Business Council's report titled "The China Effect" is flawed and misleading. It claims "the long-term benefits to the United States of trade with China are substantial and likely to endure" and that the average U.S. household stands to be \$1,000 better off by 2010 as a result of lower prices and increased productivity in the U.S. due to the China effect.

The council seeks to dismiss the idea that China's trade deficit has been growing more rapidly than the U.S. deficit with other countries, and to this end it reports that China's share of the overall deficit has remained fairly constant at around 20 percent for more than a decade. This is misleading.

The proper measure of what has been happening is the ratio of the U.S.-China trade deficit relative to the U.S. deficit with other countries, which describes how trade with China has been evolving compared to trade with everyone else. That ratio has been growing fast. In 1994, the U.S.-China deficit was 24.4 percent of the U.S. deficit with the rest of the world. In 2004 it was 33.1 percent of the deficit with everyone else.

A second claim is that Chinese imports have merely displaced imports from other East Asian economies. The reason given is that this displacement reflects a profound shift in production patterns by Asian and other multinational firms operating in the region. The logic of

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BY THOMAS PALLEY

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this claim is economically unsupportable. Businesses do not relocate to China because they like moo shu pork. They relocate because costs are lower, and those lower costs enable them to export more to the United States. Absent those lower costs they would have exported less.

Moreover, the displacement hypothesis assumes that other East Asian economies have the economic slack to produce what China produces. But other East Asian economies are operating close to capacity, and there is no way they could step in and replace China's exports. That means China's exports are substantially an addition to the steadily rising stream of exports that other East Asian economies have still been able to produce.

The central claim of the report is that the ordinary American worker and household will be \$1,000 better off as a result of trade with China by 2010. But the average household is a statistical figment created by

dividing total GDP by the total number of households. What really matters is what happens to real hourly wages and median household income, which is the income of a real world household situated in the middle of the income distribution. Here, the data for the last four years are clear. Real hourly wages have been essentially flat, and median household income actually fell from \$46,058 in 2000 to \$44,389 in 2004 — a decline of \$1,669. The reason is that all productivity growth is going to profits, and none to wages.

Chinese wage competition, China induced manufacturing job loss and the persistent threat of off-shoring are part of the explanation.

Additionally, the report fails to address the question of sustainability. Right now the U.S. is trading away manufacturing jobs and its manufacturing sector in return for cheap consumption goods. This trade involves racking up massive trade deficits, the proceeds of which China invests significantly in Treasury bonds. Interest on these bonds must be paid, which means that part of every tax dollar paid by Americans in the future will go to the Chinese government. More importantly, there is the question of what happens if this arrangement breaks down. In that event, what will be the cost to the U.S. economy and standard of living of a high dependence on imports combined with an atrophied manufacturing sector? The report provides no estimate of this scenario.

Lastly, there is no acknowledgement of the long-term national security implications that must be part of any assessment of the U.S.-China economic relationship. These issues concern a growing dependence on Chinese supplies and transfer of high technology and manufacturing capacity to China, a country that may yet turn out to be a geo-political threat to the U.S. These issues are undoubtedly hard to cost, but that does not make them less real. By ignoring them, the report implicitly zero costs them. That is unrealistic.

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## China Business Council... (From page six)

to adversely impact "the manufacturing industry as a whole." In 2005, increased trade with China reduced U.S. manufacturing employment by 250,000, or 1.5 percent. Worst hit were textiles, office and telecom equipment and electrical machinery. "By contrast, however, U.S. service sector employment has increased," says the council. "By 2005, that increase is not sufficient fully to offset the decline in manufacturing employment, leaving economy-wide employment down, but only by an estimated 50,000 jobs."

A good portion of the 500,000 manufacturing workers who will lose their jobs between 2005 and 2010 due to increased imports from China will be permanently unemployed. But turnover is normal for a flexible economy, and the monthly loss of millions of jobs is common. In June, 2005, the council points out, 4.3 million jobs were lost, while 4.6 million were created. Besides, the loss of manufacturing jobs is a long-term trend and is inevitable. The job losses in manufacturing due to China's growth "would have been inevitable in the long run anyway," says the council. To view the report, go to <http://www.chinabusinessforum.org/pdf/the-china-effect.pdf>.

# How The Economic News Is Spun

When the Department of Labor releases the monthly payroll jobs data, the press release will put the best spin on the data. The focus is on the aggregate number of new jobs created the previous month, for example, 243,000 new jobs in February. That sounds really good. News reporters report the press release. They do not look into the data to see what kinds of jobs have been created and what kinds are being lost. They do not look back in time and provide a net job creation number over a longer period of time.

This is why the American public is unaware that higher paid jobs in export- and import-competitive industries are being phased out along with engineering and other professional "knowledge jobs" and replaced with lower paid jobs in domestic services. The replacement of higher paid jobs with lower paid jobs is one reason for the decline in median household income over the past five years. It is not a large decline, but it is a decline. How can it be possible for the economy to be doing well when median household income is not growing and when economic growth is based on increased consumer indebtedness?

Many economists mistake offshore outsourcing with free trade based on comparative advantage. As a result of this mistake, ideology speaks instead of economic analysis. For example, Matthew Slaughter, an economics professor at Dartmouth, commits a huge error when he writes: "For every one job that U.S. multinationals created abroad in their foreign affiliates they created nearly two U.S. jobs in their parent operations." If Slaughter had consulted the BLS payroll jobs data, he would have realized that his claim could not possibly be true. Slaughter did not come to his conclusion by examining aggregate job creation. Instead, he measured the growth of U.S. multinational employment and failed to take into account the two reasons for an increase in multinational employment: (1) multinationals acquired many existing smaller firms, thus raising multinational employment but not overall employment; and (2) many firms established foreign operations for the first time and thereby became multinationals, thus adding their existing employment to Slaughter's number for multinational employment.

ABC News' John Stossel, a libertarian hero, recently made a similar error. In debunking Lou Dobbs' concern with U.S. jobs lost to offshore outsourcing, Stossel invokes the California-based company, Collabnet. He quotes the CEO's claim that outsourcing saves his company money and lets him hire more Americans. Turning to Collabnet's Web page, it is very interesting to see the employment opportunities that the company posts for the U.S. and for India.

In India, Collabnet has openings for eight engineers, a sales engineer, a technical writer and a telemarketing representative. In the U.S., Collabnet has openings for one engineer, a receptionist/office assistant, and positions in marketing, sales, services, and operations. Collabnet is a perfect example of how engineering and design jobs move abroad, and Americans are employed to sell and market the foreign-made products.

BY PAUL CRAIG ROBERTS

Official U.S. government reports are written to obfuscate serious problems for which the

government has no solution. For example, "The Economic Report of the President," written by the Council of Economic Advisers, blames the huge U.S. trade deficit on the low rate of domestic savings. The report claims that if only Americans would save more of their incomes, they would not spend so much on imports, and the \$726-billion trade gap would close.

This analysis is nonsensical on its face. Offshore outsourcing has turned U.S. production into imports. Americans are now dependent on offshore production for their clothes, manufactured goods and advanced technology products. There are simply no longer domestic suppliers of many of the products on which Americans depend.

Moreover, many Americans are struggling to make ends meet, having lost their jobs to offshore outsourcing. They are living on credit cards and struggling to make minimum payments. Median household real incomes are falling as higher paid jobs are outsourced while Americans are relegated to lower paying jobs in domestic services. They haven't a dollar to save.

Matthew Spiegleman, a Conference Board economist, claims that manufacturing jobs are only slightly higher paid than domestic service jobs. He reaches this conclusion by comparing only hourly pay and by leaving out the longer manufacturing work week and the associated benefits, such as health care and pensions.

Stossel simply does not know enough economics to be aware that he is being used. The bought-and-paid-for-economists are simply earning their living and their grants by serving the interests of corporate outsourcers.

Policy reports from think tanks reflect what the donors want to hear. Truth can be "negative" and taken as a reflection on the favored administration in power. Consider, for example, the conservative, Bruce Bartlett, who was recently fired by the National Center for Policy Analysis for writing a truthful book about George Bush's economic policies. Donors to NCPA saw Bartlett's truthful book as an attack on George Bush, their hero, and withheld \$165,000 in donations. There were not enough Bartlett supporters to step in and fill the gap, so he was fired in order to save donations.

When I held the William E. Simon Chair in Political Economy at the Center for Strategic and International Studies, I saw internal memos describing the grants CSIS could receive from the George H.W. Bush administration in exchange for removing me from the Simon chair.

The few reporters and columnists who are brave or naive enough to speak out are constrained by editors who are constrained by owners and advertisers. All of these reasons and others make truth a scarce commodity. Censorship exists everywhere and is especially heavy in the U.S. mainstream media.

— Paul Craig Roberts is a former research fellow at the Hoover Institute and served as assistant secretary in the Department of Treasury during the Reagan administration; email: pcr3@mac.com.

# SAIC Scientist Says U.S. Needs A Broad New System To Commercialize Technology

The traditional mechanisms by which technology has been commercialized in the United States are no longer working effectively, says Todd Hylton, director of the Center for Advanced Materials and Nanotechnology at Science Applications International Corp. In order for the United States to remain economically prosperous, a new national commercialization infrastructure needs to be put in place, particularly with regards to nanotechnology. "By virtue of evolving global competition and investor sentiments, the current model featuring small companies and venture capital investors is now under stress," says Hylton.

In the traditional commercialization model, small or start-up companies invest in promising technologies emerging from research laboratories. Larger companies then step in and provide late-stage product development funding and market access.

But that system is no longer working very well. "In the past two decades I have observed a seemingly inexorable displacement of the technology industries in this country," Hylton told a recent hearing of the Senate Commerce, Science and Transportation Committee. "Most of the newest semiconductor and display manufacturing facilities are being located offshore. From a national perspective, we must maintain leadership in the commercialization of new technologies."

This is particularly true with nanotechnology, which embodies the convergence of physical, chemical and biological sciences. Nanotechnology will ultimately be recognized "as an era of innovation lasting throughout most of this century that transformed human existence with profundity and scope never before seen," says Hylton. But due to the inadequacy of the commercialization infrastructure, the United States may not lead that revolution.

Small companies and their investors are not able to fund the 10-year-plus technology development cycle that is required for nanotechnologies to reach commercialization. Large companies don't fund technology transition efforts that exceed two years.

Venture capitalists are uninterested in funding technology development projects that exceed five years. Moreover, access to intellectual property as well as the infrastructure to manufacture prototypes is distributed across many research organizations and is generally not available to companies engaged in commercialization.

"I propose that the country consider investment in a new means to effectively commercialize nanotechnologies," says Hylton. This would entail a new era of cooperation between the private and public sectors. "The critical piece is the creation of public-private organizations dedicated to technology transition in a specific industry segment that coordinate and serve a large array of research institutions, a consortium of large and small technology companies and public economic development organizations nationwide."

These new entities would provide a conduit by which intellectual property flows from universities and research institutions to companies that can commercialize the technology. They would receive resources aimed at product development and would provide large companies with well-developed technologies and new product opportunities. Smaller technology companies would have access to product development resources and business, technical and infrastructure related services. "At the interface with the public sector, the organization provides economic development opportunities and receives assistance for participating businesses," says Hylton. Public funding for the new organization would be used to establish and maintain a core staff and facilities. Participating businesses and research institutions would contribute technical staff.

"I propose that the country consider the creation of a network of these technology transition organizations each with an industry focus such as, for example, energy conversion (solar, thermal), energy storage (batteries, hydrogen), agriculture, medical diagnostics and devices, medical therapeutics, high-speed electronics, flexible electronics and high-strength materials," says Hylton. "This network would closely parallel the research activities sponsored by the National Nanotechnology Initiative and would seek to capitalize on the research that it supports."

The advantages of such a system are numerous. It would provide longevity needed to successfully address

*(Continued on page 12)*

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# ASTRA To Develop Innovation Measurements

An effort to identify and measure the “vital signs of innovation” — output indicators for fundamental research activities that impact competitiveness — is under way at the Washington, D.C.-based Alliance for Science & Technology Research in America (ASTRA).

ASTRA executive director Robert Boege says the work, being conducted by the organization’s Research Task Force, is aimed at influencing policy by highlighting important trends. A first announcement of results is expected in the months ahead.

The problem with innovation metrics in current use is that “they might measure inputs, but it’s like driving with the rear-view mirror,” says Boege. John Marburger, President Bush’s science adviser, has expressed similar dissatisfaction, specifically with metrics now used to determine the effectiveness of federal science policy (*MTN*, Sept. 20, 2005, p. 1).

As an example of the doubtful adequacy of current metrics, Boege called one omnipresent measure — the number of patents granted each year — as providing “a photograph of something but they certainly aren’t the totality” of innovation metrics, he says. In order to protect trade secrets, many industry people and researchers prefer not to submit patent applications, he noted. Conversely, most Japanese firms have a strategy of pursuing huge numbers of patents.

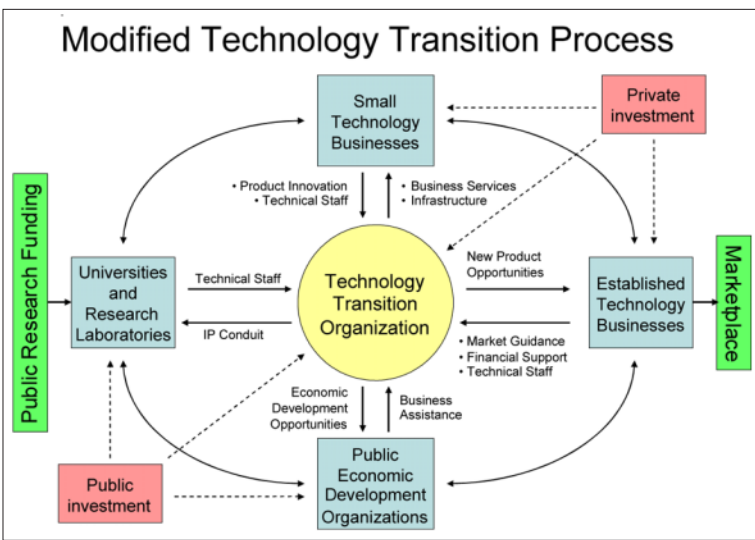
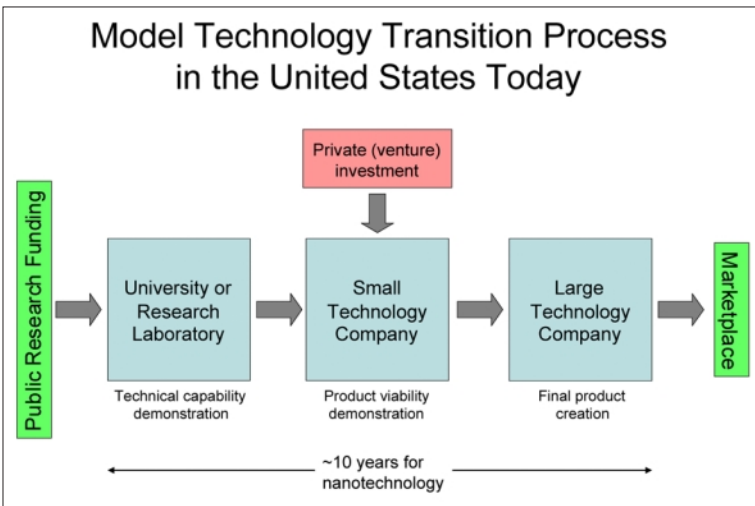
Simply counting patents is “missing a whole part of the innovation puzzle,” Boege contends. “It’s not the number that matters; it’s the quality, the patent families, how many times they are cited and the way they affect innovation in particular spaces.”

While the task force’s work has yet to be completed, Boege said he expects that ASTRA “will probably come up with several new approaches to surveying or composite indicators rather than just rehashing or using data mining.”

The problem with the latter is that “the government is simply not capturing some of the most critical data needed for policymakers to make these assessments. Do we understand R&D flows, private-capital flows? I’m not sure we’ll get our hands around that,” he admitted, “but it’s what we’re looking at.”

# Commercialization... (From page 11)

the length of the technology transition process, maximize the value of the national investment in basic research in nanotechnology and create a means to share expensive equipment for research and prototype manufacturing. It would reduce risks for private investors and entrepreneurs “thereby generating greater private investment and more new company starts,” says Hylton. It would also provide for the coordination of regional economic development resources nationwide, and create a competitive posture “that does not attempt to select winners in the marketplace.”



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