

US patents

Doubts on secrecy order

A PROPOSED new secrecy order for controlling militarily sensitive patent applications is starting to worry US high-technology industry. The proposed order, shortly to be published for comment by the US Patent Office, would be used for controlling patent applications containing information that, while not classified, is subject to export control under new authority given to the Department of Defense (DoD). Some fear the new order might make difficulties for US high-technology industries seeking patent protection abroad.

The Patent Office has long had the power to place secrecy orders on patent applications containing information whose publication would harm national security. Two of three new categories of secrecy order now proposed under the 1951 Invention Secrecy Act essentially formalize existing practice. In a nutshell, patent applications are reviewed to determine whether a secrecy order is necessary; if it is, no patent issues while the order is in force, and the inventor is ordered not to disclose the substance of the application to third parties. Patent applications in foreign countries are not permitted while the secrecy order remains in force.

The third new proposed secrecy order, for non-classifiable but export-controlled material, is rather different. It would allow US citizens access to the patent application for legitimate business purposes, and would allow patent applications in foreign countries that have export control rules and reciprocal secrecy agreements with the United States.

Concern that this might make problems for US industry have been raised by the American Association for the Advancement of Science. Although at first reading the new order seems to be a liberalization of existing practice, in fact new authority granted to the Department of Defense in its 1984 authorization

greatly extends its scope to label information sensitive and hence subject to export control. In the past, patent secrecy orders have been used only rarely for inventions arising from privately-funded research. These were the sort of inventions that, had they arisen from government-funded research, would have been instantly classified. But the new "secrecy order and permit for filing in certain countries" could be applied far more often; guidance for classifying technology as export-controllable comes from the militarily sensitive technologies list, which covers a great deal of ground.

A US inventor who found his patent application subject to one of the new orders would be able to manufacture and sell the invention in the United States (this is a "legitimate business purpose") but would risk the invention being copied and "reverse engineered" by competitors overseas while the secrecy order was in force. In the area of electronics, countries on the Pacific rim pose a particular threat. Although the inventor would be confident of ultimate patent protection in the United States and in the other countries named in the secrecy order, by the time a patent issued the market might be flooded with foreign copies. To avoid this, inventors might choose to sit on their inventions until the secrecy order expired and a patent issued, even at the expense of not establishing a captive market.

The Patent Office has said that the new proposals will be published in its official gazette for comment before being brought into force, and believes the congressionally-mandated test of when to impose secrecy orders (possible harm to national security) is unchanged. The Congressional Research Service has raised some doubts about the broad definitions in the order but finds no major legal flaw. Manufacturers' organizations are starting to take notice. **Tim Beardsley**

UK Strategic Defense Initiative contracts

Company	Project	Duration of contract (years)	Amount
Ferranti	Optical computing	1	\$142,500
General Electric	Concept definitions	1	\$100,000
General Electric	Kinetic energy weapons	1	\$100,000
Heriot-Watt University	Optical computing	1	\$142,500
UK Atomic Energy Authority	Neutral particle beam	5	\$10,000,000

ALTHOUGH the agreement signed last December for British participation in the Strategic Defense Initiative (SDI) guaranteed no specific sums, British companies had hoped to garner about \$1,500 million-worth of SDI contracts. So far, at

least, that figure is a long way off. The table above is compiled from figures supplied last week by the Federation of American Scientists. The SDI office in Washington will not confirm or deny these figures. □

Mars mission

NASA selects contractors

Washington

PLANS for a Mars Observer mission crept toward completion this week with the selection by the National Aeronautics and Space Administration of contractors for the spacecraft and booster components. NASA named RCA Astro-Electronics to build the spacecraft, which has an estimated price of over \$250 million, while Orbital Sciences Corporation will provide the \$20 million propulsion system. But NASA has already been dealt another delay in the form of a bid protest filed by Hughes Aircraft in February.

NASA's Jet Propulsion Laboratory (JPL) directs the Observer mission, which was proposed in 1983. The first in a series of low-cost inner planet probes, the spacecraft will borrow the design of Earth orbiters and is scheduled for launching from the United States's space shuttle in 1990. By 1991, Observer will be circling Mars for a full martian year. The spoils of the mission may prove useful in organizing the manned mission to Mars which, according to the issue of *Aviation Week and Space Technology* for 24 March 1986, will be suggested by the National Commission on Space early in April.

Hughes's protest stems from a JPL announcement on 20 February that NASA had expressed a preference for an independent upper stage booster design, and that proposals for integrated spacecraft-booster designs would not be considered. With this decision, NASA essentially threw out proposals submitted by Hughes, RCA and Ford Aerospace in mid-1985. But each of these companies was still in the running for the spacecraft contract, having also prepared proposals for the spacecraft alone.

Although Hughes will not comment, one NASA official says it believes it would have won the bid on integrated designs. In a statement issued last week, JPL's director Lewis Allen insists that RCA would have been victor.

A conference on 10 April at the General Accounting Office (GAO) will give both sides a chance to air their views, but GAO may not offer a resolution until June.

In the meantime, NASA cannot award a contract to RCA, and contract negotiations are stalled. JPL's confidence in the outcome, however, can be gauged from the laboratory's activity in the midst of the fervour: JPL has begun distributing RCA's spacecraft specifications to potential bidders for the mission's complement of scientific instruments.

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