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# Superconductivity Gets Top Priority : Reagan Says 'Sky Is Limit,' Acts Commercial Uses

July 29, 1987 | ROBERT GILLETTE | Times Staff Writer

WASHINGTON — President Reagan, declaring that the "sky is the only limit" on futuristic applications of the new superconductor in recent months, outlined a series of steps Tuesday designed to accelerate their commercial development ahead of the nation's

An 11-point initiative, described in greater detail by White House aides, includes proposed changes in antitrust, patent and franchise laws that the President said "will go a long way toward preserving the competitive advantage of U.S. industries in this field."

## Dazzling Array of Uses

First discovered less than a year ago by IBM Corp. scientists in Switzerland, the new superconductors are an exotic family of materials that allow to the flow of electricity at temperatures industry can now achieve cheaply and easily. As theorists struggle to explain the behavior of the materials, scientists have begun to speak of a dazzling array of applications, from the ultra-efficient transmission of electric power to computers. The materials can be produced in mass quantities.

"Science tells us that the breakthroughs in superconductivity bring us to the threshold of a new age," the President said in a highly unusual meeting of 1,200 scientists, government officials and senior business executives sponsored by the White House and the

Many in the audience appeared to share Reagan's assessment of the dawning of a new electronic revolution comparable to that brought about by the vacuum tube and, more recently, by the transistor and its progeny, the computer chip.

## Seek to Remove Obstacles

While it will be mainly up to private industry to find simple ways of manufacturing the new superconductors, which so far exist only in the laboratory, Reagan said that the government's role will be to remove as many obstacles as possible.

"The message of government is simple--we have an open door policy to the private sector," he said. "Cooperation, wherever it can be found, is of the day."

Reagan said that to move the new superconductors from the laboratory to the marketplace, it would be of "critical importance" to amend antitrust laws--laws designed for a previous century that only hold America back and give our foreign competition an unfair advantage.

In particular, the White House called for amending the National Cooperative Research Act to permit companies to cooperate in research but also in some forms of joint production.

The Administration has pressed unsuccessfully for antitrust reforms in the past, but the new proposed changes are more narrowly tailored to the commercialization of superconductors and therefore may encounter less opposition.

Reagan also will propose revisions in the U.S. patent law to strengthen protection of manufacturing processes, which is the key to their commercial development. A third proposal calls for amending the Freedom of Information Act to allow federal agencies to withhold "valuable scientific and technical information" produced in federal laboratories which "will harm U.S. economic competitiveness."

Among administrative steps to promote superconductor development, the Defense Department is drawing up a three-year, \$1-billion program to develop the technology for applications ranging from Reagan's space-defense initiative to anti-submarine warfare.

Reagan also announced that he will establish a "wise men" advisory group on superconductivity that will operate under the V while the departments of energy and commerce and the National Aeronautics and Space Administration will open centers for the federally run Lawrence Berkeley Laboratory and the Ames Research Center at Mountain View, Calif., at Argonne National Bureau of Standards laboratory in Boulder, Colo.

The two-day superconductivity conference has drawn criticism from American scientists over a decision by the White House officials from participating, but the President's science adviser, William R. Graham Jr., defended the restriction.

"It's the home team we're trying to talk to here, in a very competitive and high-technology world," Graham told reporters.

Staff Writer James Gerstenzang contributed to this story.