DEVELOPING SUPERCONDUCTORS

The United States and Japanese economic systems are competing to develop superconductor technology into important new products.

Because of the U.S. Government's poor record in promoting commercial use of technologies it helped pay for, it has been adopting a policy of decentralized management of technologies created with Government funding. Under these policies, creating organizations such as universities, contractors, and Government laboratories are given the authorities and incentives belived necessary to promote commercialization by firms that might use new technology. The policy depends on the normal response of U.S. industry to market forces to make the best decisions. The President reinforced the policy on April 10 by signing Executive Order 12591 on Facilitating Access to Science and Technology.

Japan approaches important new technologies differently. The Wall Street Journal reported on March 20, that four days after superconductor advances were announced by the University of Houston, MITI announced its intention to organize a research consortium of Japanese companies, universities, and government labs. A MITI official was quoted as saying, "We've gathered all the leading-edge researchers in Japan. We need to get everybody together to share information and decide how to move."

Here is a beginning list of options to consider for the U.S. response to the Japanese action.

1. Adhere to the evolving U.S. policy of allowing those who create technologies and potential industry users to find eachother and negotiate in their own best interests.

2. Develop a clearinghouse for information about superconductivity technology that could be used to help bring industry and researchers together.

3. Create an evaluation process using Government and private sector experts to help researchers and industry evaluate superconductivity developments as a rapid and economical advisory service.

4. Develop a pool of superconductivity technology, into which universities, Government laboratories, and industry would place their technology, under terms that would guarantee their participating in the benefits of any commercial use of their contribution.

5. Create a market by accelerating Government procurement of products that require the newest superconductivity technology, (e.g. reduced size supercollider).