## **FAX**

Date: June 14, 2009

TO: Jannifer Lo

Fax: 1571 270 9100

From: Deborah Shapiro

Phone:

Email:

Re:

Dr. Zalman Shapiro 2009 NMTI NOMINEE

Pages including this: 7

Dear Jennefer.

This is the corrected letter from May 21 (She had to go sway Jean for several days Jud 50, it was much

w/factors letters 9-15)

## Francis P. Cotter



May 18, 2009

National Medal of Technology and Innovation Nomination Evaluation Committee c/o The United States Patent and Trademark Office Attention: Jennifer Lo, Program Manager

Re: Nomination of Dr. Zalman Shapiro

## Dear NMTI Committee Members:

This letter supports the nomination of Dr. Zalman Shapiro for the National Medal of Technology and Innovation. I worked many years at the periphery of American science and technology, where I knew him, and assure you that there are few men who have made greater contributions to our national defense and economic well-being.

The development and building of the U.S.S. Nautilus was a great feat. Of late, we see few developments of its magnitude and with the same completion speed. It was authorized by the Congress in 1948 and christened by Mrs. Eisenhower in 1954. It gave birth to our nuclear navy—the envy of the world.

Dr. Shapiro faced many challenges in development of the energy source for this new type of submarine. Testifying in Congress after his success, Admiral Rickover said: "If I had the Nautilus in World War II, I could have controlled the North Atlantic with it, alone.

There were several nuclear reactors operating in the nuclear weapons program of wartime America, and they were huge. The new objective: develop one small enough to fit in a submarine. Novel materials were needed and Dr. Shapiro provided the leadership, skill and dedication that provided them. Zircalloy is virtually synonymous with Zalman Shapiro.

Of course, the nuclear Navy developments made civilian nuclear power possible and Dr. Shapiro also made additional and significant contributions, here. Nuclear power gave the world a new source of energy. Japan, denied a domestic energy source by nature, now has 55 nuclear reactors.

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The idea that innovation could do the most to ease our economic turmoil has a growing base of proponents. Speaking to Business Week, Dr. Daron Acemoglu of MIT put it this way: "Ninety-five percent of economists agree that innovation is the most important thing for long range growth." The whole array of Dr. Shapiro's inventions, as he now approaches the awarding of his 15th patent, were innovative and had these economic benefits. He passes that test with ease.

Dr. Shapiro is a man of character who is distinguished not only by the high order of his technical accomplishments, but also by the ethical tenets he brought to all of it. I consider it an honor to recommend Dr. Shapiro for the National Medal of Technology and Innovation. America needs more men like Dr. Shapiro.

Sincerely,

Francis Cotter

Retired Vice-President of Government Affairs Westinghouse Electric Corporation

