David B. Pall, 90, Invented Filters for Blood, Is Dead

By Jennifer Bayot

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Dr. David B. Pall, a chemist who invented dozens of sophisticated filters, most notably for purifying blood for transfusions, died Tuesday at his home in Roslyn Estates, N.Y. He was 90.

He died of complications of Alzheimer's disease, his daughter Ellen said.

Dr. Pall received 181 patents for his designs, said a representative of the Pall Corporation, which he established in 1946. The designs included filters for helicopter engines and for liquids used aboard airplanes and spacecraft.

His blood filters -- which he invented after his first wife, Josephine, died of aplastic anemia, a blood disease, in 1959 -- have made transfusions significantly safer, helping to prevent fevers and certain viral infections as well as the rejection of some transplanted organs.

In 1990, Dr. Pall received the National Medal of Technology for inventions that "have contributed significantly to society in safety of flight, upgrading of industrial products and processes and improved safety of blood transfusions."

David Boris Pall was born on April 2, 1914, in Thunder Bay, Ontario, a son of Russian immigrants, and was raised in a farming community in Saskatchewan. He attended McGill University in Montreal, earning a bachelor's degree in chemistry and a doctorate in physical chemistry.

In 1939, he moved to New York to work for a chemical company before becoming a research chemist on the Manhattan Project, the secret research program during World War II that led to the atomic bomb.

In 1944, with a \$3,000 investment from a college friend, Dr. Pall set up shop in his garage in Queens and began developing a metallic filter that could better handle high temperatures, heavy pressure and corrosive materials.

In 1946, he started the Micro Metallic Corporation, now the Pall Corporation, to distribute his design. The company is based in East Hills, N.Y. Dr. Pall retired as chairman in 1992.

He was a trustee of the North Shore University Hospital in Manhasset, N.Y., and received honorary doctorates from McGill University and Long Island University.

Dr. Pall's second wife, Helen, died in 1998. A daughter, Stephanie, died in 1988, and a son, William, died in 1997.

Survivors include three daughters, Ellen Pall of New York, Jane Block of Roslyn, and Abigail Weinshank of Englewood Cliffs, N.J.

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