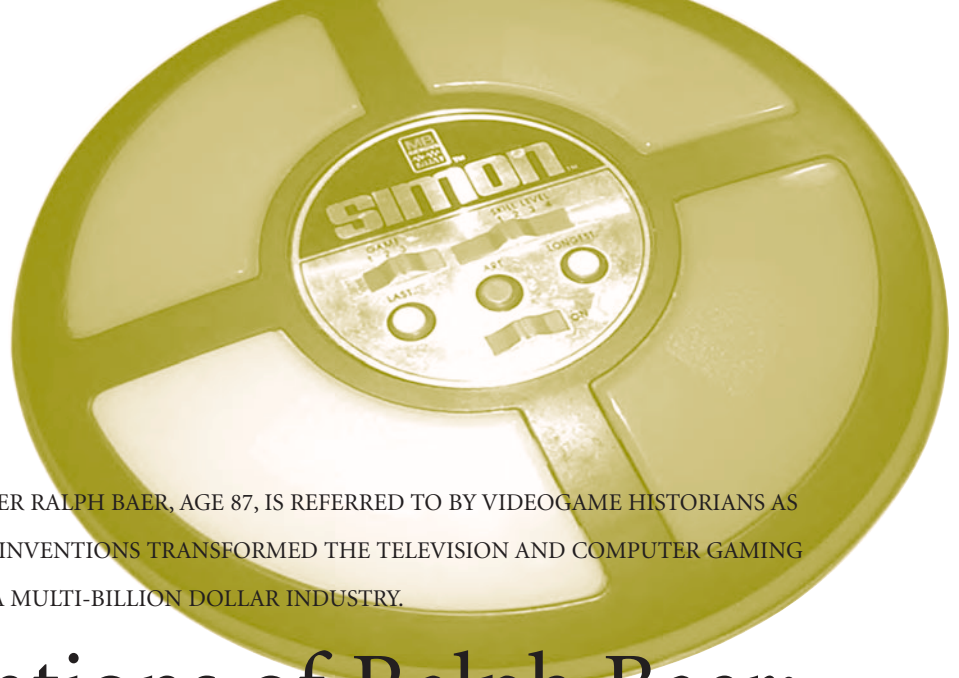


BY SHARON CALLAHAN



VISIONARY AND VIDEOGAME PIONEER RALPH BAER, AGE 87, IS REFERRED TO BY VIDEOGAME HISTORIANS AS THE “FATHER OF VIDEOGAMES.” HIS INVENTIONS TRANSFORMED THE TELEVISION AND COMPUTER GAMING INDUSTRIES AND HELPED LAUNCH A MULTI-BILLION DOLLAR INDUSTRY.

The Inventions of Ralph Baer:

A LEGACY TO PIERCE LAW’S IP LIBRARY

“Baer created a cultural phenomenon,” says Dean John D. Hutson. “His vision changed the way we interact with technology.”

Many members of Pierce Law’s graduating classes grew up playing with Baer’s inventions such as the Magnavox “Odyssey” game, the first home videogame, and “Simon,” an electronic saucer-shaped game which made its debut in 1978.

This spring, Baer donated an original version of the predecessor of the Magnavox Odyssey, the world’s first home videogame console to Pierce Law. This game system is known in the industry as the “Brown Box.” It will be part of a working display in the intellectual property library. Baer will also donate a collection of documents, deposition records and videos, patents, videogame product commercials and a collection of videogame history pages, as well as an autographed copy of his book, *Videogames: In the Beginning*.

According to Professor of Law and Intellectual Property Librarian Jon Cavicchi JD ’84/LLM ’99, “This donation enhances our unique collection of resources facilitating research into the synergy of law, science, technology and intellectual property law. The display joins the Homer Blair Patent Model Collection, the only such collection at any law school in the world.”

Baer holds more than 50 United States patents and 100 international patents and has earned numerous awards for his life’s work. In 2005, he received a Legend Award at the G4 Video Game Award Show. In 2006, President Bush awarded Baer the National Medal of Technology, the nation’s highest award for innovation, in honor of his “groundbreaking and pioneering creation, development and commercialization of interactive videogames.”

Last year, he received the Pioneer Award at the Game Developer’s Conference and the IEEE Masaru Ibuka Consumer Electronics Award, given each year to a team or to an individual who has made an outstanding contribution to consumer electronics. It is awarded by the Technical Field Awards Council of the Institute of Electrical and Electronics Engineers (IEEE).

Many of the prototypes of Baer’s videogame-related inventions are now part of the collection of the Smithsonian Institution’s National Museum of American History. The Smithsonian’s Lemelson Center for the Study of Invention and Innovation recently published an online archive of Baer’s videogame development documents as well as a collection of papers generated by Baer during his military service in WWII.

The Museum of the Moving Image in Queens, NY, houses a fully-functional replica of Baer’s “Brown Box” and other models. These are on permanent display and are playable hands-on by museum visitors.

The American Computer Museum in Bozeman, MT, also displays a “Brown Box,” as does the Computer History Museum in Mountain View, CA, along with museums in Germany including the Heinz Nixdorf Museum in Paderborn, and the Computerspielemuseum in Berlin.

Baer was born in Germany in 1922 and, at age 16, fled to the United States with his family, two years after Nazi anti-Semitism forced him to leave school for work in an office. He worked briefly in a New York factory that produced leather accessories, enrolling at the National Radio Institute and studying part-time to become a radio and television service technician. In 1943, he joined the United States Army, assigned to Military Intelligence, attached to Eisenhower’s headquarters in

London, but stationed elsewhere in England and later in France.

In 1949, Baer earned a BS in television engineering, the first such degree awarded in the United States, from the American Television Institute of Technology in Chicago.

In the early 1950s, Baer worked on electro-medical equipment, while employed by Wappler, Inc., followed by design at Loral Electronics of a television set and subsequent military electronics work at Transitron, Inc., in New York, where he later became vice president of engineering. He moved with the firm from New York to Manchester, NH. In 1956, he joined Sanders Associates (now part of BAE Systems) in Nashua, NH. While there, he ran the Equipment Design Division, serving as an engineering fellow until his retirement in 1987. Baer has been an independent inventor and licensor of electronic consumer products, toys and games ever since.

In the 1950s, when television sets were gaining popularity, Baer says “I thought it would be fun to add an interactive, game-playing element to passive television viewing.” Nearly 15 years later, while at Sanders, Baer along with two colleagues, further developed his ideas, creating games using transistor circuitry and housed in simple boxes. In 1966, he developed a prototype for a chase game featuring player-controlled screen

symbols. Sanders funded further research which culminated in games featuring machine-controlled on-screen characters such as the ball in video ping-pong games.

In 1968, Baer filed his first patent for gaming technology. This patent was followed by many others. In 1970, Magnavox (now Phillips, North America) signed a license agreement for rights to Baer’s “Brown Box,” which the company production-engineered and introduced as the “Odyssey” home game system in 1972.

In addition to his success with videogames, Baer also developed a variety of successful electronic games and toys, including “Simon,” “Maniac,” “Computer Perfection,” Tonka Toy’s “Talking Tools,” a talking picture frame (“Time Frame”), a talking speedometer for kid’s bikes (“BikeMax”) and many other electronic products.

Baer has lived in Manchester for 50 years. He is the father of Pierce Law alumnus, Mark Baer JD ’88.

Growing Up with an Inventor

BY MARK BAER JD ’88

I’ve often wondered—and its often been asked—where is the source of my dad’s great inventiveness and his great passion for creating new and interesting projects, processes and products. The answer to this inquiry is not always the same, nor is it necessarily definitive. There are, however, some clues out there, and in those clues some lessons for us all.

Present this inquiry to my dad, Ralph, and he’ll respond in a quiet and unassuming way that perhaps it’s “in the genes” or it “just comes naturally.” While this is undoubtedly true, the full story is more complex.

First and foremost it takes a mind that is both technically proficient as well as in touch with its more creative side. This is not as easy as it sounds. Think of the image of the prototypical ‘geek’ and you’ll fairly conjure up the image of someone connected completely to his or her technical side but unaware, or perhaps uninterested, in the creative aspects of life.

Then there is the other, perhaps more common, condition. Think of how many times you’ve heard someone say something to this effect: ‘I just use it, I don’t know how it works’ or even more commonly something along the line of ‘I’m technically challenged.’ Yet, this same individual can probably wax profusely about a great figure in history, a terrific novel or an inspiring piece of art recently observed.

The trick is to combine the two processes.

And, in that regard, my dad has succeeded spectacularly. Surely, he has innate ability. But even with that going for him, he took the time and hard work needed to learn the trades and improve his technical abilities. He studied and worked on building his electrical engineering acumen for quite some time. With that knowledge in place he regularly and methodically thought about using his technical skills in creative and exploratory ways. This was not quick, nor was it necessarily easy. His work was often disregarded and disdained in the early years. But he, along with others in his various working groups, persisted and ultimately



succeeded. It was the ability to combine both the creative and the technical, which appears to have been key to the creative accomplishments during his long and successful career.

And where is the lesson for the rest of us? Well, that part is clear. We likewise need to study and work hard to build solid bases of knowledge and ability from which we can strive to make our own mark on the world. It may not be of the magnitude of the “Father of Videogames” nor will it likely spawn a worldwide industry and culture. However, if we develop both the technical side of our abilities—whether it is in the sciences, or other disciplines such as the law—and combine that with creative, new thinking, we can make something happen, we can make a difference.

As one of the first three kids to have ever played videogames (I have two siblings) and perhaps the first ever to smack down his sibling (granted, both my brother and sister claim the same distinction), I have seen first hand the results of combining these two skill sets.

And, looking back, this is one of the great things about Pierce Law for me as the school gave me an opportunity to gather up the ‘technical skills’ if you will, of the practice of law while simultaneously allowing and nurturing the creative side of the study of law. This gave me a terrific background and a head start coming out of the gate at graduation. It’s been a great advantage over so many other lawyers during the course of my career.

For this, I am extremely grateful. And in that spirit, many of us have worked toward memorializing the great start-up and legal process which gave birth to the videogame industry by seeing that many early and important materials related to videogame litigation are permanently enshrined in the Franklin Pierce Law Center library. They could not have found a better home.

Mark Baer JD '88, Assistant Attorney General, State of Utah.