

CHEMICAL HERITAGE FOUNDATION

ROBERT E. LORENZINI

Transcript of an Interview
Conducted by

Hyungsub Choi

at

Menlo Park, California

on

17 September 2007

(With Subsequent Corrections and Additions)

CHEMICAL HERITAGE FOUNDATION
Oral History Program
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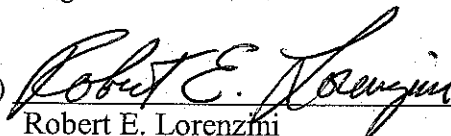
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ROBERT E. LORENZINI

1936 Born in Boston, Massachusetts on 11 December

Education

1954 – 1958 B.S., Materials Science, Stanford University
1958 – 1960 M.S., Materials Science, Stanford University

Professional Experience

1960 – 1962 Rheem Semiconductors
Member of Technical Staff, Research and Development

1962 – 1963 Allegheny Electronic Chemical Company
Chief Engineer

1963 – 1964 Knapic Electrophysics
Chief Engineer

1964 – 1968 Elmat Corporation
President

1969 – 1986 Siltec Corporation
Chairman and CEO

1988 – 2004 SunPower Corporation
CEO, Chairman

Honors

1979 SEMI Award

ABSTRACT

Robert Lorenzini begins the interview by briefly describing his childhood and studying metallurgy at Stanford University for both undergraduate and graduate degrees. After graduation Lorenzini was recruited by Rheem Semiconductors, where he adapted his Master's thesis work on zone melting in metals to work with silicon. Lorenzini's efforts lead to Rheem's own crystal growing furnace and its ability to produce its own silicon wafers. Following brief stints at the Allegheny Electronics Chemical Company and Knapic Electrophysics, Lorenzini decided to capitalize on his reputation as a furnace designer and started Elmat Corporation. Building his first commercial furnace with a focus on speed and maximum operation uptime, Elmat quickly gained customers such as RCA and Texas Instruments. Elmat was eventually purchased by General Instruments in 1968 and Lorenzini founded the Siltec Corporation in 1969. With innovations such as the zero dislocation silicon technique Siltec quickly gained a stable customer base. Lorenzini then described the delicate balance of working with supplying big semiconductor manufacturers with both equipment and silicon supplies. In the late 1980s, as the industry was going through a downturn, Siltec was acquired by Mitsubishi. Free to pursue other projects, Lorenzini got interested in photovoltaics and founded SunPower Corporation with Stanford professor Richard Swanson. Lorenzini concluded the interview by offering a positive outlook on the PV industry.

INTERVIEWER

Hyungsub Choi is the manager for Electronics, Innovation, and Emerging Technology programs at CHF. Choi earned a Ph.D. from the Johns Hopkins University in the history of science and technology. He earned an M.S. in history of technology at Georgia Institute of Technology and a B.S. in engineering from Seoul National University. Choi took over the center's electronic materials program in November 2006. He has published extensively on such subjects as the history of electronic manufacturing in post-World War II Japan, RCA's transistor production, and solid-state innovations.

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