

# Jacob Rabinow

*Born January 8, 1910, Kharkov, Russia; inventor at the National Bureau of Standards who, in August 1952, reported experimental work on a notched-disk memory, the predecessor of the IBM disk memory.*



*Education:* BS, engineering, City College of New York, 1933; graduate degree, electrical engineering, 1934.

*Professional Experience:* National Bureau of Standards: mechanical engineer to chief of the Electro-Mechanical Ordnance Division, 1938-1954, chief research engineer, National Engineering Laboratory, 1972-1989, consultant, 1989-present; own engineering company, 1954-1964; vice president, Control Data Corporation, 1964-1972; head, Rabinow Advanced Development Laboratory, 1964-1972; founder, RABCO Company,<sup>1</sup> 1968.

*Honors and Awards:* The Exceptional Service Award, Department of Commerce, 1949; President's Certificate of Merit, 1948; Certificate of Appreciation, War Department, 1949; Naval Ordnance Development Award, 1945; Certificate of Commendation, NDRC, 1945; Edward Longstreth Medal, Franklin Institute, 1959; 50th Anniversary Medal, CCNY Engineering School, 1969; Jefferson Medal Certificate, American Patent Law Association, 1973; Harry Diamond Award, IEEE, 1977; Industrial Research and Development Scientist of the Year, 1980; doctor of humane letters, Towson State University, 1983; fellow, IEEE; fellow, American Association for the Advancement of Science; fellow, Audio Engineering Society.

Jacob Rabinow was born in Kharkov, Russia, on January 8, 1910. After what he calls a too eventful life as a child in European Russia and Siberia during the revolution, his family moved to China in 1919 and finally came to the US in 1921. He was educated in the schools of New York and graduated from the City College of New York in 1933 with a BS in engineering, and with a graduate degree in electrical engineering in 1934.

Jacob Rabinow spent the depression years at various jobs and finally was appointed as a mechanical engineer to the National Bureau of Standards in 1938. Here he worked on a great many ordnance devices during the war and rose rapidly through the ranks to become chief of the Electro-Mechanical Ordnance Division.

In 1954 he left the government to form his own engineering company. Ten years later, in 1964, his company joined Control Data Corporation; until 1972 he was vice president of that company and head of the Rabinow Advanced Development Laboratory. In 1968 he also formed the RABCO Company to manufacture his straight-line phonographs. This company was later acquired by the Harmon Kardon Corporation.

In March 1972 he rejoined the National Bureau of Standards and held several positions, among them that of chief research engineer, National Engineering Laboratory.

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<sup>1</sup> This company was later acquired by the Harmon Kardon Corporation.

In April 1989 Rabinow retired from the government service and is now a consultant at the National Institute of Standards and Technology (formerly NBS). His main duty is the evaluation of inventions submitted to the Office of Energy-Related Inventions.

Jacob Rabinow holds 226 US patents on a very wide variety of mechanical and electrical devices. Among these are the automatic regulation of clocks and watches formerly used in all American automobiles, the automatic letter-sorting machine used by the US Post Office, the magnetic particle clutch, formerly used in several European automobiles, now used in a Subaru car, in airplanes, in servomechanisms and in a great many other machines, the “best-match” principle in optical- and magnetic-character-reading machines, many safety mechanisms for ordnance devices, and the straight-line phonograph.

In addition his patents concern such diverse arts as photography, computer equipment (the world's first magnetic disk memory), card punches and card sorting equipment, and a wide variety of optical, electromagnetic, and mechanical inventions.

He is a member of the National Academy of Engineering, the Cosmos Club, the Philosophical Society of Washington, and the Sigma Xi. He is a fellow of the IEEE, of the American Association for the Advancement of Science, and of the Audio Engineering Society.

In addition to his technical work, Jacob Rabinow has delivered literally hundreds of talks on specific technologies and on invention in general. He was a Regent's Lecturer at the University of California at Berkeley, a frequent guest on radio and TV programs, and the author of many papers. His only full-length book, entitled *Inventing for Fun and Profit*, was published in 1989 by San Francisco Press.

## **BIBLIOGRAPHY**

### **Significant Publications**

Rabinow, J., *Inventing for Fun and Profit*, San Francisco Press, San Francisco, 1989.

## **UPDATES**

Jacob Rabinow died in 1999. (MRW, 2013)