“I have in mind. . .” David Sarnoff, RCA, and the Arc of the American Century

Alexander B. Magoun
David Sarnoff Library
davidsarnoff.org
How Far Will You Go?
Different Worlds, c. 1900

Postcard courtesy Ray Chase
Reflections of Home

Lincoln Cabin in Coles County,
http://lincoln.lib.niu.edu/fimage/lincolnimages/slide01.jpg;
Civil War Harper’s Weekly 1865,
www.sonofthesouth.net/leefoundation/civil-war/1865/president-abraham-lincoln.htm
The Child is Father of the Man
1906-12
One Empire’s Hubris?

Postcard courtesy Ray Chase
I have in mind a plan . . . . The idea is to bring music into the house by wireless.
David Sarnoff
c. fall 1915
Priming the Roaring 20s

DEMPSEY-CARPENTIER FIGHT

to be received by
WIRELESS TELEPHONE
at the
Old Post Road Garage
RADIO STATION

CALL LETTER 2 BAK

JOSEPH SLAVIN, Operator

The greatest international sporting event in the history of the world, the Dempsey-Carpentier Boxing Match, on July 2nd, will be broadcasted from the ringside, by Radiophone on the largest scale ever attempted.

Through the courtesy of Tex Rickard, promoter of the big fight, voice broadcasting of the event is to be the means of materially aiding the work of the American Committee for Devastated France and also aiding the Navy Club of the United States.

These organizations will share equally in the contributions secured by large gatherings in theatres, halls and other places.

Preliminary bouts will start at one o'clock and the big bout will start at 2 o'clock.

An admission fee of $1.00 will be charged which money is to be sent to the Committee of the National Amateur Wireless Association.
Capitalizing on Success, 1926-29

Announcing the National Broadcasting Company, Inc.

National radio broadcasting with better programs permanently assured by this important action of the Radio Corporation of America in the interest of the listening public.

RADIO CORPORATION OF AMERICA

Owen D. Young, Chairman of the Board
James G. Harbord, President

The new Radiola de luxe Super-Heterodyne 64 is the finest receiving and reproducing instrument that has ever come from the associated Research Laboratories of General Electric, Westinghouse and RCA. It embodies all the world's knowledge of the radio art. With amazing musical range and realism, it provides a fidelity of tone hitherto unknown. Exclusive features such as automatic volume control, and meter to insure accurate tuning. Simplified operation from house current. Finely finished cabinet of rich design, with ingeniously arranged dials.

$550 (less Radio-strings).
Investing in Television, 1928-29
Your corporation has faith in the progress which is being made by its scientists and engineers. May 1935

Fathering TV
1930-41

And now we add radio sight to sound. April 1939
Assuring an American Century, 1941-45
Advancing an Art and Science, 1942-45
Introducing TV, 1947
The Future’s So Bright
The Color War, 1945-50
Electronic Memory
1942-48
Inventing Solid-State Consumer Electronics, 1948-53
Licensing Japan

www5b.biglobe.ne.jp/~AA676/radio/photo.htm
www.etedeschi.ndirect.co.uk/sony/picts/
Searching for a Flat TV

Bernard J. Lechner Collection
A new device

Consider the following structure (cross-section)

N Type 
region

P Type
contact

N Type Contact

N Type 
region

P Type
contact

Intrinsic Material

In one possible mode of operation – the p-type contact – n-type contacts are forward biased. Then one has essentially a P-N-P forward biased diode. However, due to the intrinsic region, the current in this region is essentially space charge limited, and for low

V_{bias}, the current should be very small.

\begin{center}
\begin{tikzpicture}
\node (n) at (0,0) {N};
\node (p) at (0,-1) {P};
\node (n') at (0,-2) {N'};
\node (p') at (0,-3) {P'};
\draw (n) -- (p); \draw (n') -- (p');
\end{tikzpicture}
\end{center}

Now if the input is made sufficiently positive or negative, space charge will be injected (from the contacts) and the channel will become N-type.

\begin{center}
\begin{tikzpicture}
\node (n) at (0,0) {N};\node (p) at (0,-1) {P};
\draw (n) -- (p);
\end{tikzpicture}
\end{center}
“Man’s accumulated knowledge and cultural treasures will be made available to nearly everybody through computer centers. . . . It will simply be a matter of pushing the correct buttons on computerized telephones, radios and televisions. Any document—from an automatically translated literary work to the latest technical publication—will be made quickly available.”

July 1964
An End to Optimism, 1966-67

Virtual Motor City Collection,
Black Power/Racial Battlegrounds
www.autolife.umd.umich.edu/ Race/R_Casestudy/

White House Commission on Remembrance,
www.remember.gov/.../ vietnam/vietnam_medic.jpg by Henri Huet
“In the final analysis, it is the use to which the new invention is put, and not the invention itself that determines its value to society. . . . Now I believe we must involve ourselves in the social applications of technology with the same energy and devotion we give to its development.”

-September 1966
Introducing LCDs, 1965-72
Strategic Choices I: Diversification, not Innovation
Ignoring Light-Emitting Diodes (LEDs)
Ignoring Home Computers, 1971-72

Joseph A. Weisbecker Collection
Strategic Choices II: Home Video

Robert A. Bartolini Collection
1986: A Sign of the Technological Times?

NASA photo via Space Shuttle Challenger Disaster - A NASA Tragedy
space.about.com/cs/challenger/a/challenger.htm