Lifetime Achievement Award

- Brian Berg, Berg Software Design
- Jim Handy, Objective Analysis
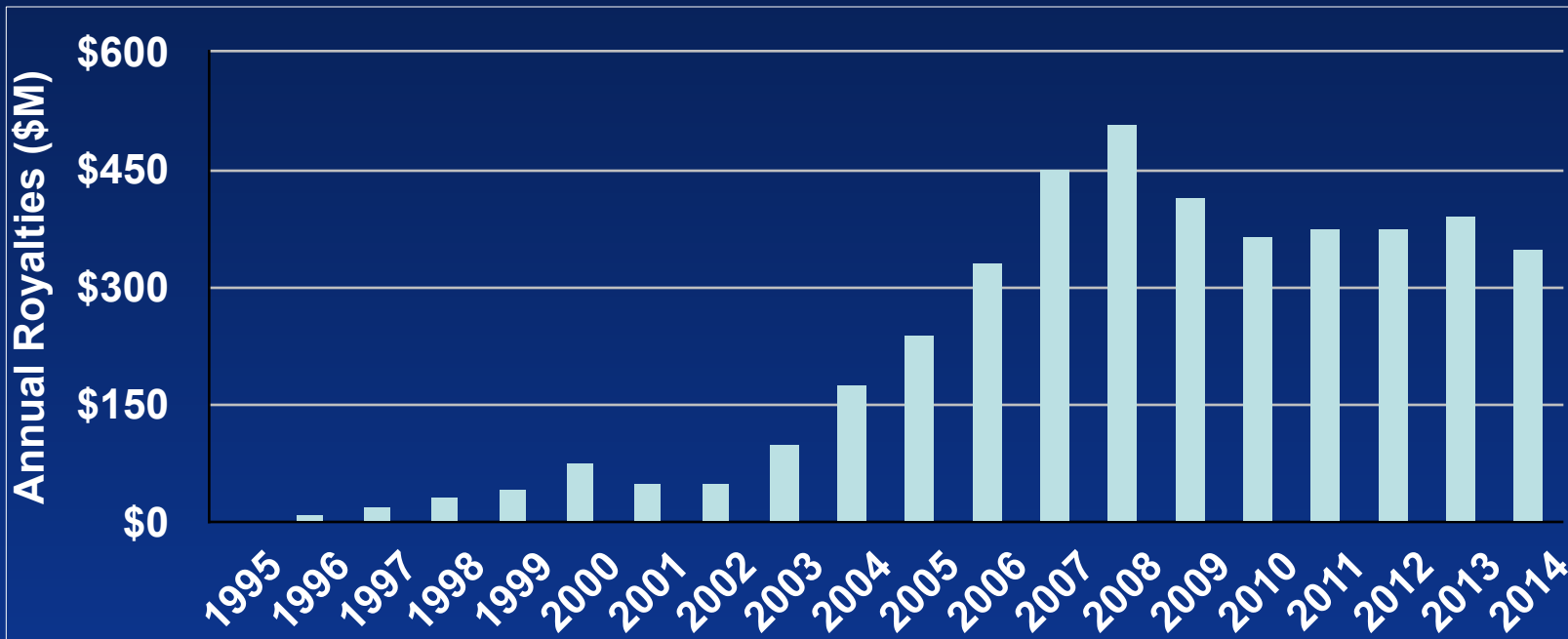
Audio-Visual Sponsor

Bob Norman
Designer of "System Flash"

FIG._1A.

[57] **ABSTRACT**

A system of Flash EEprom memory chips with controlling circuits serves as non-volatile memory such as that provided by magnetic disk drives. Improvements include selective multiple sector erase, in which any combinations of Flash sectors may be erased together. Selective sectors among the selected combination may also be de-selected during the erase operation. Another improvement is the ability to remap and replace defective cells with substitute cells. The remapping is performed automatically as soon as a defective cell is detected. When the number of defects in a Flash sector becomes large, the whole sector is remapped. Yet another improvement is the use of a write cache to reduce the number of writes to the Flash EEprom memory, thereby minimizing the stress to the device from undergoing too many write/erase cycling.

FIG._3A.

System Flash Enabled Products
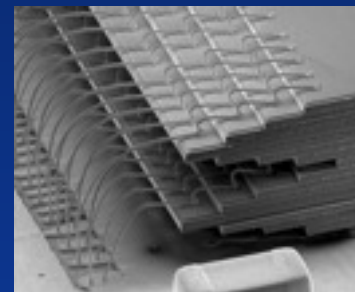
SanDisk Royalty Revenues

2011

2012

2013

2014

Bob Norman
Designer of "System Flash"
(Video)

Santa Clara, CA
August 2015