Breakthrough Nanotechnology Will Bring 100 Terabyte 3.5-inch Digital Data Storage Disks

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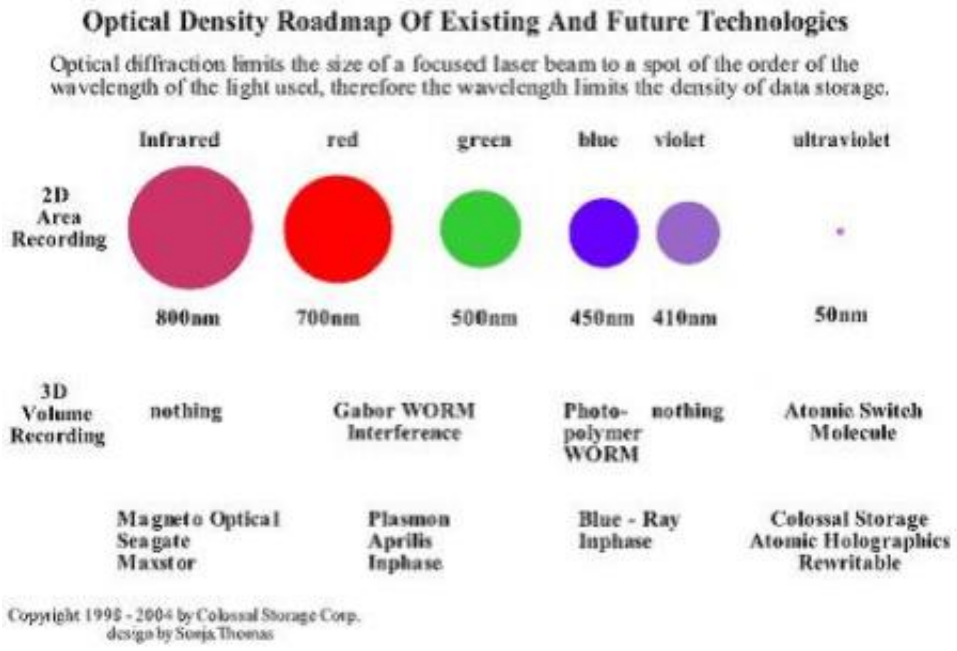


Have you ever dream of **100 terabyte of data per 3.5-inch disk**? New patented innovation nanotechnology from Michael E. Thomas, president of Colossal Storage Corporation, makes it real.

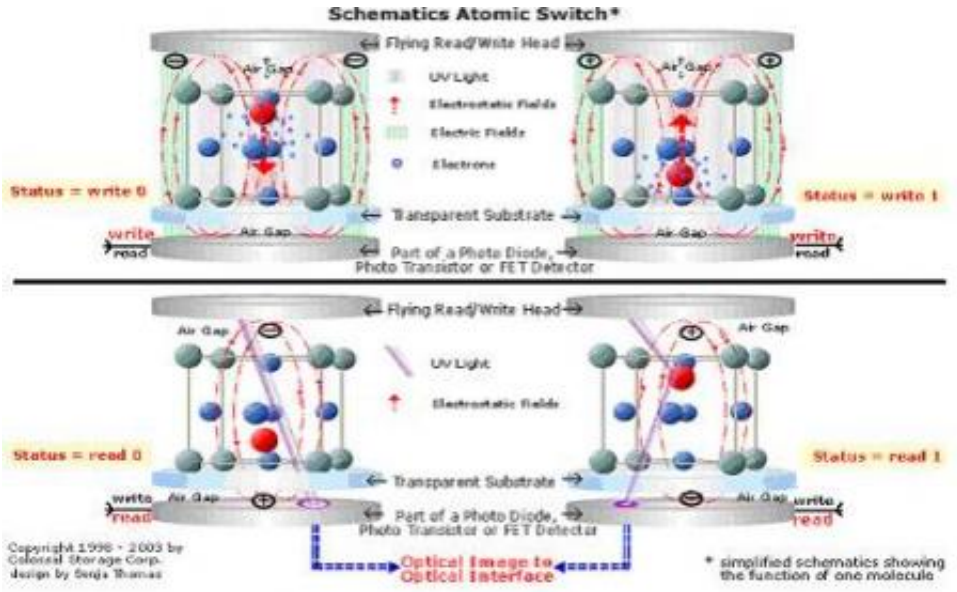
Michael invented and patented the world's first and only concept for non-contact UV photon induced electric field poling of ferroelectric non-

linear photonic bandgap crystals, which offers the possibility of controlling and manipulating light within a UV/Deep Blue frequency of 1 nm to 400 nm.

It took him 14 years to find a practical conceptualization that would work to advance the storage industry; **3D Volume Holographic Optical Storage Nanotechnology**, for which Michael holds the patents. He was invited to present this fascinating discovery to the National Science Foundation in February 2004.

This invention and patents on a technique for changing matter at the molecular level is one of the World's only new enabling technologies, having many hundreds of electro-optic applications.

Atomic Holographic Nanotechnology will allow for the first time a functional method for programmable molecular lenses that will allow incoming light to be rejected, modified internally, or allowed to pass unaltered through a transparent lens known as disk, tape, card, drum, film, etc.



By being able to program optical lenses, many applications based on light and color can be developed, such as holographic storage, bio-terror detection devices, optical electronics, security products, and hundreds of other products never seen before on the world's markets.

The small size of ferroelectric transparent structures makes it possible to fabricate nano-optical devices, such as volume holographic storage, having both positive and negative index of refraction that will allow molecular particles of an atomic size to be modified, controlled, and changed to perform a specific function, desired task, used for low cost accurate chemical / biological matter detection, and reprogrammed to accept new non-volatile data and molecular functions.

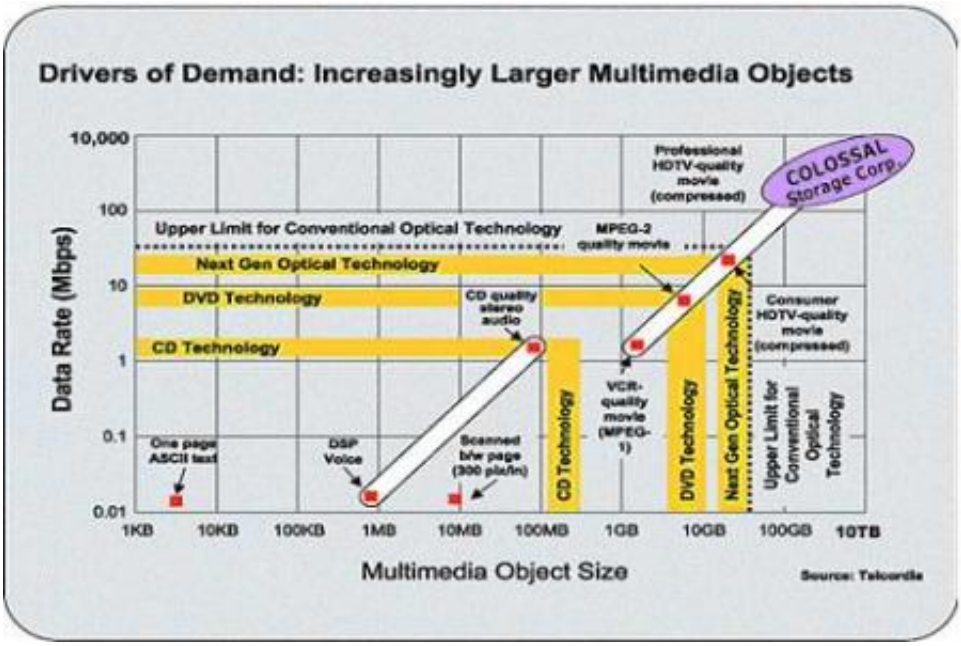
The expected cost of the Atomic Holographic DVR disc drive will be from $570 to $750 with the replacement discs for $45.

One 10 terabyte to 100 terabyte 3.5 in FEdisk would be EQUAL to a

10,000 to 100,000 Gigabyte disk drive. That's greater 1,000 times any State of the Art hard disk technology with 100 Gigabytes on one disk. 2 EXABYTES of NEW data is generated every year world wide, and growing.

Michael is a 30-year pioneer in the development of peripheral storage technologies and a holder of various patents.

“In 1974 I was making 5 Megabyte disk packs - the biggest at that time in the world. At the same time, IBM, Burroughs, Honeywell, and other Computer professionals said no one would ever need that much storage,” says Michael. “In 1989 Bill Gates (the Chairman of Microsoft) said that the personal computer would never need more than 256 Kbytes of cache memory and 40 megabytes of hard drive storage. Today's PC has on average 1-2 megabytes of cache and 20 to 60 gigabyte hard drives. The need for new storage technology is evident to only to those having backgrounds in data storage.”



Colossal Storage Theory of Operation of Patented Technology

“I gave up two times because I was not able to work thru a concept of non-volatile, non-destructive readout,” says Michael. “I finally had a break thru when reviewing Einstein/Plank and Niels Bohr Atomic Theories.”

He found that by using an Ultra Violet Photon and an Electric Field it was possible, theoretically, to use the electrons (write current) to make the binary state molecule transition back and forth between the two states. The "Atomic Switch" was born.

The concept of an atomic or molecular switch by "Photon/Laser Induced Electric Field Poling" existed. By using UV photons of lesser quantum energy it was possible to use diffraction and interference from the binary states of the molecule.

The changing state of the molecule and the diffracted photons allowing for a group of light and dark lines to be characterized as data. 3D Volume means reading and writing billions of bits at one time in Volume (x,y,z).

There are still a lot of research and development unknowns for this new and fascinating atomic holographic optical storage, but Michael believes that he has created a revolutionary concept to keep pace with requirements of mass data storage, for the next millennium.

Link: Colossal Storage Corporation