**FLUORESCET MULTILAYER DISC**

**ABSTRACT**

**C**ompact discs were a revolutionary product at its time and influenced many spheres of human activity. People started recording music of high quality, which didn't get worse with the time as it happens to be on tape. As soon as CDs appeared in computer industry they immediately became an undoubted helper both for users and for programmers. The latter were able to increase volume of their program products by adding video and audio elements etc.**FMD**(**Fluorescent Multilayer Disk**), which can provide us with a staggering 140 GB of storage space, seems to be an enticing solution for the storage-hungry masses.The company Constellation 3D demonstrates a new format: **FMD**(**Fluorescent Multilayer Disk**), which can provide us with a staggering 140 GB of storage space, seems to be an enticing solution for the storage-hungry masses.

Constellation 3D's technology implements the concept of the volumetric storage of information. Data is recorded on multiple layers located inside a disc or a card, as opposed to the single layer method available in compact discs, and double layer method available in DVD’s. The recording, reading and storing of the information is accomplished through the use of fluorescent materials embedded in pits and grooves in each of the layers. The fluorescent material emits radiation when excited by an external light source. The information is then decoded as modulations of the intensity and color of the emitted radiation.