

18 May 2006

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Maxell's Next-Generation Holographic Storage

New, durable, reliable and low cost media

A revolutionary technology is being processed in the matter of media storage using the latest Blu-ray features, only this time it is focused on a higher transfer rate. 120MBps (Megabytes per second), this means 1,6 TB (Terabytes) per disc. This would be called Holographic Storage because the information will be stored using light-sensitive crystals, thus making it superior and competitive to any available disc or hard drive technology. The holographic technology is rather a breakthrough in the recording process of the optical media. The hologram will be viewed in this manner: when it is illuminated from the original direction of the reference beam, a 3-dimensional image of the object appears where the object was originally. Some holograms must be viewed with laser or monochromatic (single color) light, and others with white light, that's why the storage disc will be protected by a shell for the natural light not to reach. The laser beams allow storing information in a number of hundreds of data pages in a single location (3D hologram images). This would be capable to store up more than 240 hours of TV broadcast (in 1.6 million high-resolution color photos) and up to 150 million pages with only one holographic removable drive, or disk. That means it can be stored more than 63 times the capacity of a DVD with one 13-centimeter optical disk. According to Pofcher, this technology will enable the storage of approximately half a million of 300-page books on a single disk. Regardless of the high capacity storage, there will be inexpensive disks available for this device. Liz Murphy, vice president of marketing for InPhase Technologies said: "Combining high storage densities and fast transfer rates with durable, reliable, low cost media, Holographic technology is poised to become a compelling choice for next-generation storage and content distribution needs." Maxell's holographic storage products announced the first generation of holographic media with 300GB of storage capacity and a 20MBps transfer rate for September 2006.