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Scientists design a technique to differentiate between original and bootleg CDs

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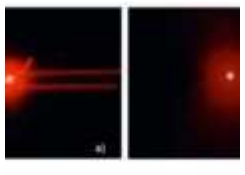

laser light patterns for (a) a burned CD
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tograph.

University of Granada

A group of scientists of the University of Granada has developed a new optical technique which permits to know if a Compact Disc (CD) is original or a copy. This new technique is economical, fast and effective, and allows to detect illegal CD copies. Optical CDs are at present the most extended physical means of distribution of digital information around the world. However, bootlegging in this sector is a serious problem which involves important economic losses and which has not been solved up to now.

Original CDs are made by printing, through a process which is profitable for large print runs. However, copies are obtained by performing a series of marks on the surface through the "burning" with laser of commercial recorders on an organic material with which a series of spiral grooves are made in a blank CD.

Through the new technique proposed by the scientists of the Department of Optics of the UGR it is possible to identify if a CD has been recorded using a method or a device different to those used in industrial processes, which allows to differentiate between original CDs and copies. This technique uses the phenomenon of light diffraction on a CD surface to appreciate the differences between original and bootleg CDs, as they generate different types of diffraction models.

DVDs too

This technique has also been tested in DVDs, where it has also been validated, and they intend to develop it for the detection of bootleg CDs for latest generation devices susch as Blue-Ray or HD-DVD.

Source: Universidad de Granada

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