

Title (en)

A MULTILAYER HARD DRIVE DISK AND METHOD TO PRODUCE SAME

Title (de)

MEHSCHICHTIGE PLATTE FÜR FESTPLATTENLAUFWERK UND HERSTELLUNGSVERFAHREN

Title (fr)

UNITE DE DISQUE DUR MULTICOUCHES ET SON PROCEDE DE FABRICATION

Publication

EP 0992034 A1 20000412 (EN)

Application

EP 98926322 A 19980611

Priority

- US 9811610 W 19980611
- US 87793497 A 19970618

Abstract (en)

[origin: WO9858367A1] A hard drive disk substrate comprising a disk shaped core that has at least one face clad by an outer metal layer that has an average thickness of at least 10 micrometers to at most 300 micrometers. The core is comprised of a ceramic or ceramic-metal composite material. The ceramic material may be an oxide, nitride, boride, silicide, carbide or alloy thereof. The ceramic-metal composite may be the ceramic just described and a metal, such as a transition metal, beryllium, magnesium or aluminum. The disk substrate is prepared by: (a) cladding at least one face of a disk shaped core with a metal, such as aluminum, and (b) finishing the core clad with the outer metal layer to form the disk substrate. The outer metal layer may be clad by gluing a metal foil to the core or heating a metal foil in contact with a face of the core to a temperature sufficient to adhere the foil to the core. The resultant disk substrate may be flatter than the core it is made from and may be finished to make a hard drive disk capable of a faster maximum rotational speed and greater areal density than an aluminum hard drive disk of the same size.

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IPC 8 full level

G11B 5/73 (2006.01); **G11B 5/84** (2006.01)

CPC (source: EP US)

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See references of WO 9858367A1

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