

Title (en)  
MIG AND THIN FILM HYBRID READ/WRITE HEAD

Title (de)  
HYBRIDER LESE-/SCHREIBKOPF MIT MIG- UND DÜNNFILMSTRUKTUR

Title (fr)  
TETE DE LECTURE-ECRIURE HYBRIDE OBTENUE PAR LES PROCEDES A METAL DANS L'ENTREFER ET DE COUCHE MINCE

Publication  
**EP 0689707 A4 19960529 (EN)**

Application  
**EP 94911547 A 19940311**

Priority  
• US 9402620 W 19940311  
• US 3201893 A 19930316

Abstract (en)  
[origin: WO9422136A1] A metal in the gap (MIG) and thin film hybrid read/write head utilizes less magnetic material and thus possesses reduced inductance. The hybrid head is also less sensitive to throat height tolerances and better control is obtained over such geometrical parameters as gap and track. The hybrid head consists of an individual core (210), soft magnetic layer (201), non-magnetic layer (202), and C-cut (204). The hybrid head is manufactured by simplified, higher yielding techniques in a batch process.

IPC 1-7  
**G11B 5/127**; **G11B 5/33**; **G11B 5/23**; **G11B 5/147**

IPC 8 full level  
**G11B 5/31** (2006.01); **G11B 5/105** (2006.01); **G11B 5/127** (2006.01); **G11B 5/147** (2006.01); **G11B 5/17** (2006.01); **G11B 5/187** (2006.01); **G11B 5/21** (2006.01); **G11B 5/39** (2006.01)

CPC (source: EP)  
**G11B 5/105** (2013.01); **G11B 5/127** (2013.01); **G11B 5/1274** (2013.01); **G11B 5/1475** (2013.01); **G11B 5/17** (2013.01); **G11B 5/1871** (2013.01); **G11B 5/21** (2013.01); **G11B 5/3173** (2013.01); **G11B 5/39** (2013.01); **G11B 5/3967** (2013.01)

Citation (search report)  
• [A] US 4843486 A 19890627 - YOSHIMATSU TOSHIKANE [JP], et al  
• [A] EP 0062739 A2 19821020 - IBM [US]  
• [E] EP 0614173 A2 19940907 - SONY CORP [JP]  
• [A] PATENT ABSTRACTS OF JAPAN vol. 010, no. 157 (P - 464) 6 June 1986 (1986-06-06)  
• [A] PATENT ABSTRACTS OF JAPAN vol. 011, no. 324 (P - 628) 22 October 1987 (1987-10-22)  
• [A] PATENT ABSTRACTS OF JAPAN vol. 010, no. 195 (P - 475) 9 July 1986 (1986-07-09)  
• See references of WO 9422136A1

Designated contracting state (EPC)  
AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)  
**WO 9422136 A1 19940929**; CN 1119475 A 19960327; EP 0689707 A1 19960103; EP 0689707 A4 19960529; JP H08508360 A 19960903

DOCDB simple family (application)  
**US 9402620 W 19940311**; CN 94191479 A 19940311; EP 94911547 A 19940311; JP 52111794 A 19940311