

Title (en)  
DECOUPLING CLUTCH, PARTICULARLY FOR MARINE

Title (de)  
TRENNKUPPLUNG, INSBESONDERE FÜR SCHIFFSANWENDUNGEN

Title (fr)  
EMBRAYAGE A DECOUPLAGE, DESTINE EN PARTICULIER A UNE UTILISATION DANS DES NAVIRES

Publication  
**EP 1680320 A4 20080910 (EN)**

Application  
**EP 04761444 A 20041020**

Priority  
• AU 2004001428 W 20041020  
• AU 2003905767 A 20031020  
• US 51583803 P 20031030

Abstract (en)  
[origin: WO2005037643A1] Stand alone decoupling clutch (10) is used in drive shafts, eg of watercraft. Clutch (10) is separate from any gearbox, etc, does not change the direction of rotation of the drive shaft, and has a single clutch area which allows slippage at any speed or torque. Electronic control system (44) controls slippage of the clutch (10) providing for low speed operation, high energy launches, driveline protection, etc. Slip speed is controlled sensing input shaft speed (38) and the output propeller speed (40) and altering hydraulic pressure accordingly on a clutch-compressing piston by opening direct-acting, high flow, electro-hydraulic solenoids (36).

IPC 8 full level  
**B63H 23/30** (2006.01); **F16D 25/0638** (2006.01); **F16D 48/06** (2006.01)

CPC (source: EP KR)  
**B63H 23/30** (2013.01 - EP KR); **F16D 25/0638** (2013.01 - EP); **F16D 48/066** (2013.01 - EP); **B60W 2710/025** (2013.01 - EP); **F16D 2500/1026** (2013.01 - EP); **F16D 2500/1045** (2013.01 - EP); **F16D 2500/1105** (2013.01 - EP); **F16D 2500/30415** (2013.01 - EP); **F16D 2500/30426** (2013.01 - EP); **F16D 2500/70406** (2013.01 - EP); **F16D 2500/70426** (2013.01 - EP)

Citation (search report)  
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• [X] US 3823801 A 19740716 - ARNOLD B  
• [Y] US 2775328 A 19561225 - YOKEL EDWARD C  
• [Y] FR 2759132 A1 19980807 - LUK GETRIEBE SYSTEME GMBH [DE]  
• [XY] JP H08150999 A 19960611 - NIPPON KOKAN KK, et al  
• [Y] JP H07196090 A 19950801 - JIDOSHA BUHIN KOGYO KK, et al  
• See references of WO 2005037643A1

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)  
**WO 2005037643 A1 20050428**; **WO 2005037643 A8 20060615**; CA 2542748 A1 20050428; EP 1680320 A1 20060719; EP 1680320 A4 20080910; JP 2007509292 A 20070412; KR 20060083222 A 20060720

DOCDB simple family (application)  
**AU 2004001428 W 20041020**; CA 2542748 A 20041020; EP 04761444 A 20041020; JP 2006535908 A 20041020; KR 20067007541 A 20060419