

Title (en)  
Improved hinge.

Title (de)  
Verbessertes Scharnier.

Title (fr)  
Charnière améliorée.

Publication  
**EP 0415868 A1 19910306 (EN)**

Application  
**EP 90500083 A 19900806**

Priority  
• ES 8903041 U 19890831  
• ES 9001888 U 19900530

Abstract (en)  
"IMPROVED HINGE" consisting of two sections, an internal one (11) of circular cross-section mounted directly on the door (10) and an external one comprising two semisections (12) and (15) which are mounted on the vertical jamb of the door, window or the like (13). On the head (32) an attachment (17) is fitted which matches up externally with section (12). Fitted inside and at the top end of section (11) is attachment (18) and at the bottom end the tapering washer (24) which has a hole (24a) in the middle and is welded to the bottom edge of section (11).

IPC 1-7  
**E05D 1/04**; **E05D 7/08**

IPC 8 full level  
**E05D 1/04** (2006.01); **E05D 7/08** (2006.01); **E06B 7/36** (2006.01)

CPC (source: EP)  
**E05D 1/04** (2013.01); **E05D 7/081** (2013.01); **E06B 7/362** (2013.01); **E05Y 2900/132** (2013.01); **E05Y 2900/148** (2013.01); **E06B 2007/365** (2013.01)

Citation (search report)  
• [X] US 2365378 A 19441219 - BENSON ERNEST H  
• [Y] FR 2452567 A1 19801024 - MASSON JEAN PAUL  
• [A] DE 3613574 A1 19871223 - PUSCHKARSKI THEODOR [AT]  
• [A] US 2323625 A 19430706 - SEAMAN DAVID J  
• [A] US 2184259 A 19391219 - SEAMAN DAVID J  
• [A] FR 2473603 A1 19810717 - CAHORS APP ELEC [FR]  
• [A] GB 1284258 A 19720802 - STILLEMANS PIERRE [BE]  
• [A] FR 1234177 A 19601014  
• [A] US 3117827 A 19640114 - CECALA MICHAEL L  
• [AP] CH 672346 A5 19891115 - DRAWAG AG

Cited by  
CN106168107A; EP1561893A3; US11339595B2; BE1020498A5; EP0624702A1; FR2723136A1; NL1029545C2; US2019195010A1; WO2010064901A1

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