

Title (en)
Carter

Title (de)
Ölwanne

Title (fr)
Bac à huile

Publication
EP 0952313 A3 20000816 (DE)

Application
EP 99105814 A 19990323

Priority
DE 19818590 A 19980425

Abstract (en)
[origin: EP0952313A2] The sump has a bearing outer grid made of non-ferrous metal or of a plastic (possibly fiber-reinforced) with similar rigidity, and an internal thin-walled bowl (2) made of plastic. The bowl may be cast or injected into the grid. The grid may have an upper rectangular frame (3) for fixing it to the crankcase, which has transverse ribs along the long sides to fit the outline of the sump.

IPC 1-7
F01M 11/00; **F02F 7/00**

IPC 8 full level
F01M 11/00 (2006.01)

CPC (source: EP US)
F01M 11/0004 (2013.01 - EP US); **F01M 2011/0091** (2013.01 - EP US)

Citation (search report)
• [X] EP 0811761 A1 19971210 - BAYERISCHE MOTOREN WERKE AG [DE]
• [A] DE 8323945 U1 19831208
• [A] US 4898261 A 19900206 - WINBERG ARVID E [US], et al
• [A] US 4519348 A 19850528 - HAMILTON EDWARD [US]
• [A] GB 499667 A 19390127 - METALASTIK LTD, et al
• [A] "Stampable reinforced nylon sheet is used for 1980 Cadillac oil pans", DESIGN ENGINEERING, vol. 51, no. 1, 1 January 1980 (1980-01-01), New York, pages 30 - 31, XP002140263

Cited by
FR2904039A1; DE10119937A1; DE10124071A1; DE102006002956A1; DE102006002956B4; FR2817591A1; EP1253299A2

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

DOCDB simple family (publication)
EP 0952313 A2 19991027; **EP 0952313 A3 20000816**; DE 19818590 A1 19991104; DE 19818590 C2 20000323; US 6131543 A 20001017

DOCDB simple family (application)
EP 99105814 A 19990323; DE 19818590 A 19980425; US 29919299 A 19990423