

Title (en)  
Multipart stage housing.

Title (de)  
Mehrteiliges Stufengehäuse.

Title (fr)  
Carter d'etage en plusieurs parties.

Publication  
**EP 0588258 B1 19951122 (DE)**

Application  
**EP 93114584 A 19930910**

Priority  
DE 4230713 A 19920914

Abstract (en)  
[origin: EP0588258A1] The invention relates to a stage housing of multipart construction for use in centrifugal pumps, a flow-guiding insert (8) provided with open blade ducts being arranged in a pressure-loaded tubular annular element (2). The open ducts are covered by diaphragm-like, thin-walled elements (6, 13).

IPC 1-7  
**F04D 29/44**; **F04D 1/06**

IPC 8 full level  
**F04D 1/06** (2006.01); **F04D 29/44** (2006.01)

CPC (source: EP)  
**F04D 1/063** (2013.01); **F04D 29/445** (2013.01)

Cited by  
EP2143953A1; EP1028255A4; US6082960A; CN100432450C; US7632065B2; WO9708461A1; WO2005103499A1; US8376698B2

Designated contracting state (EPC)  
DE ES FR GB IT NL

DOCDB simple family (publication)  
**EP 0588258 A1 19940323**; **EP 0588258 B1 19951122**; DE 4230713 A1 19940317; DE 59301000 D1 19960104; ES 2082568 T3 19960316

DOCDB simple family (application)  
**EP 93114584 A 19930910**; DE 4230713 A 19920914; DE 59301000 T 19930910; ES 93114584 T 19930910