

Title (en)  
Turbomachine exhaust case drain

Title (de)  
Dränrohr des Austrittsgehäuses einer Strömungsmaschine

Title (fr)  
Drain de carter d'échappement de turbomachine

Publication  
**EP 1970541 A1 20080917 (FR)**

Application  
**EP 08151545 A 20080218**

Priority  
FR 0701905 A 20070316

Abstract (en)  
The case (10) has an annular channel (18) pierced with an evacuation orifice (22) in which a drain (36) is mounted to evacuate a liquid e.g. fuel, from the channel. The drain is formed of a tubular cylindrical body (38), and has a wall (40) formed at an end of the body for fixation of the drain by setting in the orifice. The drain is made of a metal alloy having a thermal dilation coefficient that is higher than the thermal dilation coefficient of the case around the orifice.

Abstract (fr)  
Carter d'échappement (10) de turbomachine, comportant une rainure annulaire (18) percée d'un orifice (22) dans lequel est monté un drain (36) qui est formé d'un corps cylindrique tubulaire (38), pour l'évacuation de liquides retenus dans cette rainure (18), et qui comprend une jupe (40) formée à une extrémité du corps cylindrique (38) pour la fixation du drain (36) par sertissage dans l'orifice (22) de la rainure (18) du carter (10).

IPC 8 full level  
**F01D 9/06** (2006.01); **F01D 25/30** (2006.01); **F01D 25/32** (2006.01)

CPC (source: EP US)  
**F01D 25/30** (2013.01 - EP US); **F01D 25/32** (2013.01 - EP US); **F05D 2250/231** (2013.01 - EP US); **F05D 2260/602** (2013.01 - EP US)

Citation (applicant)  
• EP 1304514 A1 20030423 - GEN ELECTRIC [US]  
• FR 2643678 A1 19900831 - UNITED TECHNOLOGIES CORP [US]  
• EP 1621741 A1 20060201 - HITACHI LTD [JP]

Citation (search report)  
• [XA] EP 1304514 A1 20030423 - GEN ELECTRIC [US]  
• [XA] FR 2643678 A1 19900831 - UNITED TECHNOLOGIES CORP [US]  
• [A] EP 1621741 A1 20060201 - HITACHI LTD [JP]

Cited by  
US9771831B2; FR3008450A1; FR3037614A1; FR3011035A1; US2015082769A1; US10006307B2; WO2015004059A1

Designated contracting state (EPC)  
DE FR GB

Designated extension state (EPC)  
AL BA MK RS

DOCDB simple family (publication)  
**EP 1970541 A1 20080917; EP 1970541 B1 20100407**; CA 2625314 A1 20080916; CA 2625314 C 20150811; DE 602008000925 D1 20100520; FR 2913725 A1 20080919; FR 2913725 B1 20111028; RU 2008110028 A 20090920; RU 2472004 C2 20130110; US 2008226445 A1 20080918; US 8277176 B2 20121002

DOCDB simple family (application)  
**EP 08151545 A 20080218**; CA 2625314 A 20080312; DE 602008000925 T 20080218; FR 0701905 A 20070316; RU 2008110028 A 20080314; US 4850508 A 20080314