

Title (en)
WATER COOLED BRAKE

Title (de)
WASSERGEKÜHLTE BREMSE

Title (fr)
FREIN REFROIDI À L'EAU

Publication
EP 3027929 A1 20160608 (EN)

Application
EP 14718498 A 20140321

Priority
• US 201313956973 A 20130801
• US 2014031410 W 20140321

Abstract (en)
[origin: WO2015016983A1] A braking system (10) includes at least one rotating disc (20,22,24) and at least one brake disc (34,36). A brake disc wear plate (40) is configured for retarding engagement with a rotating disc brake pad (26). Each brake disc has an annular coolant cavity (50) associated with two inlet ports (56) spaced apart 180° and two outlet ports (58) spaced apart 180°. Each outlet port is spaced 90° from an adjacent inlet port. Each port leads to a respective radial channel (130). The channels are in open flow communication with each other. Inlet port coolant received into an inlet channel flows in both angular directions toward the outlet ports. Heated coolant gathered at an outlet channel is a mixture of coolant received from both inlet channels. Each inlet channel includes a stepped configuration to divert additional coolant to the outermost portion of the coolant cavity, which portion underlies the outermost (and hottest) portion of the wear plate.

IPC 8 full level
F16D 65/853 (2006.01)

CPC (source: EP)
F16D 55/40 (2013.01); **F16D 65/853** (2013.01); **F16D 2055/0058** (2013.01); **F16D 2065/784** (2013.01)

Citation (search report)
See references of WO 2015016983A1

Designated contracting state (EPC)
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Designated extension state (EPC)
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