

Title (en)

WELD COOLING APPARATUS AND METHOD USING AN EXPANSIBLE COOLANT AND A REFRACTORY SEAL

Title (de)

SCHWEISSKÜHLUNGSVORRICHTUNG UND VERFAHREN MIT AUSDEHNBAREM KÜHLMITTEL UND FEUERFESTER ABDICHTUNG

Title (fr)

APPAREIL DE REFROIDISSEMENT DE SOUDURE ET PROCÉDÉ UTILISANT UN LIQUIDE CALOPORTEUR EXTENSIBLE ET UN JOINT RÉFRACTAIRE

Publication

EP 2667997 A1 20131204 (EN)

Application

EP 12703328 A 20120124

Priority

- GB 201101379 A 20110126
- GB 2012000064 W 20120124

Abstract (en)

[origin: WO2012101399A1] A weld cooling apparatus (1) for the forced cooling of a heated weld zone in a workpiece (10) being welded is described. The cooling apparatus (1) comprises at least one nozzle (6) for ejecting expansible liquid coolant and a compliant seal (20). The compliant seal (20) extends from the cooling apparatus (1) and is arranged such that, in use, the seal (20) make sealing engagement with the surface of the workpiece (10). In use, the seal (20) forms a barrier between the coolant and the weld pool. The seal (20) comprises a refractory material, typically a ceramic cloth, for example, a woven alumino silica based fibre cloth, a flexible graphite, or a fibre glass reinforced silicone rubber.

IPC 8 full level

B23K 9/16 (2006.01); **B23K 20/12** (2006.01); **B23K 31/02** (2006.01); **B23K 37/00** (2006.01); **C21D 9/50** (2006.01)

CPC (source: EP)

B23K 9/16 (2013.01); **B23K 20/122** (2013.01); **B23K 31/02** (2013.01); **B23K 37/003** (2013.01); **C21D 9/505** (2013.01)

Citation (search report)

See references of WO 2012101399A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

WO 2012101399 A1 20120802; EP 2667997 A1 20131204; GB 201101379 D0 20110309

DOCDB simple family (application)

GB 2012000064 W 20120124; EP 12703328 A 20120124; GB 201101379 A 20110126