

Title (en)
STEEL RAILS

Title (de)
STAHLSCHIENEN

Title (fr)
RAILS EN ACIER

Publication
EP 1641978 A1 20060405 (EN)

Application
EP 04743134 A 20040628

Priority
• GB 2004002786 W 20040628
• GB 0314839 A 20030626

Abstract (en)
[origin: GB2403174A] A steel rail comprises a plurality of individual rails joined by flash butt welding. The width of the heat affected zone (HAZ) between neighbouring welded rails at the load bearing surface of the rail is less than 30mm, preferably less than 25mm. The flash butt welding process comprises the steps of preheating the rail ends to be joined and subjecting the preheated rail ends to a forging load in excess of 500kN.

IPC 1-7
E01B 11/50; B23K 11/00

IPC 8 full level
B23K 11/00 (2006.01); **B23K 11/04** (2006.01); **B23K 11/34** (2006.01); **E01B 11/50** (2006.01)

CPC (source: EP GB)
B23K 11/0073 (2013.01 - EP); **B23K 11/04** (2013.01 - EP GB); **B23K 11/34** (2013.01 - EP); **E01B 11/50** (2013.01 - EP);
B23K 2101/26 (2018.08 - EP)

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
GB 0314839 D0 20030730; GB 2403174 A 20041229; GB 2403174 B 20061115; EP 1641978 A1 20060405; WO 2005001204 A1 20050106

DOCDB simple family (application)
GB 0314839 A 20030626; EP 04743134 A 20040628; GB 2004002786 W 20040628