

Title (en)
FRICTION STIR TOOL FOR FRICTION WELDING

Title (de)
REIBRÜHRWERKZEUG ZUM REIBSCHWEISSEN

Title (fr)
OUTIL DE MELANGE PAR FRICTION DESTINE AU SOUDAGE PAR FRICTION

Publication
EP 1423228 A1 20040602 (DE)

Application
EP 02767069 A 20020802

Priority
• DE 0202858 W 20020802
• DE 10139687 A 20010811

Abstract (en)
[origin: DE10139687C1] The sensor (7) is integrated into a telemetric measuring system (10) on the tool. Tool control uses temperature values from the welding zone acquired by a sensor arranged with a measuring site in the pin (4) of tool. Preferred Features: The system continuously sends the measured temperature values to a control and regulating unit of the tool arranged outside of the tool. The sensor is a thermocouple or a pyrometer with a sapphire rod in the pin or an optical fiber in the pin.

IPC 1-7
B23K 20/12

IPC 8 full level
B23K 20/12 (2006.01)

CPC (source: EP US)
B23K 20/1235 (2013.01 - EP US); **B23K 20/1255** (2013.01 - EP US); **B23K 2101/32** (2018.07 - EP US)

Citation (search report)
See references of WO 03015975A1

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

DOCDB simple family (publication)
DE 10139687 C1 20030220; CA 2455611 A1 20030227; EP 1423228 A1 20040602; JP 2004538156 A 20041224; US 2005001009 A1 20050106; US 7032801 B2 20060425; WO 03015975 A1 20030227

DOCDB simple family (application)
DE 10139687 A 20010811; CA 2455611 A 20020802; DE 0202858 W 20020802; EP 02767069 A 20020802; JP 2003520518 A 20020802; US 48655504 A 20040824