

Title (en)  
Manipulator for a ladle of a casting machine

Title (de)  
Manipulator für einen Giesslöffel einer Giessanlage

Title (fr)  
Manupulateur d'une pache d'une machine de coulée

Publication  
**EP 1486278 B1 20060111 (DE)**

Application  
**EP 04450124 A 20040609**

Priority  
AT 9312003 A 20030613

Abstract (en)  
[origin: EP1486278A1] Metal casting assembly has a casting spoon (1) that is moved by a manipulator. The casting spoon moves on a swivel-shaft (8) on an arm (6) that is adjustable in at least one direction. The casting spoon and swivel shaft are attached by push-fit spring lock attachments.

IPC 8 full level  
**B22D 41/05** (2006.01); **B22D 17/30** (2006.01); **B22D 39/02** (2006.01)

CPC (source: EP)  
**B22D 17/30** (2013.01); **B22D 39/026** (2013.01)

Cited by  
DE102007026985B4; CN111112592A; CN106180666A; CN115464119A; DE102007026985A1

Designated contracting state (EPC)  
AT DE HU IT

DOCDB simple family (publication)  
**EP 1486278 A1 20041215; EP 1486278 B1 20060111**; AT 412764 B 20050725; AT A9312003 A 20041215; AT E315450 T1 20060215; DE 502004000242 D1 20060406

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