

Title (en)

Electrode in an electric gathering apparatus

Title (de)

Elektrode für elektrisches Stauchgerät

Title (fr)

Electrode pour appareil de refoulement électrique

Publication

**EP 0781612 A1 19970702 (EN)**

Application

**EP 95120709 A 19951229**

Priority

- EP 95120709 A 19951229
- JP 16497894 A 19940718

Abstract (en)

In a conductive plate of an upper electrode (4) of an electric gathering apparatus (A) for manufacturing a poppet valve used in an internal combustion engine, there is formed a polygonal bore (20) in which a drive shaft (15) is engaged. An annular cut-away portion (21) which is larger than the engagement bore (20) in diameter is formed, thereby preventing a burr (17,23) and increasing durability of the electrode. <IMAGE>  
<IMAGE>

IPC 1-7

**B21J 9/08**; **B21K 1/22**

IPC 8 full level

**H05B 6/56** (2006.01); **B21J 1/04** (2006.01); **B21J 1/06** (2006.01); **B21J 9/08** (2006.01); **B21K 1/20** (2006.01); **B21K 1/22** (2006.01)

CPC (source: EP)

**B21J 9/08** (2013.01); **B21K 1/22** (2013.01)

Citation (search report)

- [A] GB 2024310 A 19800109 - INGERSOLL RAND CO
- [A] DE 3538950 A1 19860605 - BARMAG BARMER MASCHF [DE]
- [A] US 3242695 A 19660329 - ROSS JR PETER M
- [A] US 5153547 A 19921006 - MAMIYA YASUNORI [JP]
- [A] PATENT ABSTRACTS OF JAPAN vol. 009, no. 297 (M - 432) 25 November 1985 (1985-11-25)

Cited by

EP2272993A1; EP1127953A3; US8828160B2

Designated contracting state (EPC)

DE ES FR GB IT

DOCDB simple family (publication)

**EP 0781612 A1 19970702**; JP H0824984 A 19960130

DOCDB simple family (application)

**EP 95120709 A 19951229**; JP 16497894 A 19940718