

Title (en)

Plasma spray gun for spraying powdered or gaseous materials.

Title (de)

Plasmaspritzgerät zum Versprühen von pulverförmigem oder gasförmigem Material.

Title (fr)

Appareil de pulvérisation par plasma de matériaux en poudre ou gazeux.

Publication

**EP 0500491 B1 19951018 (DE)**

Application

**EP 92810094 A 19920210**

Priority

DE 4105408 A 19910221

Abstract (en)

[origin: EP0500491A1] The plasma spray gun has an indirect plasmatron for generating a long arc. Said plasmatron has at least one, for example, three, cathodes (1,20), an annular anode (3) which is at a distance from the cathode, and a plasma channel (4) which extends from the cathode to the anode. The latter is formed by the anode ring (3) and a number of annular neutrodes (5 to 12) which are electrically insulated from one another. The plasma channel (4) has a constriction zone (33) in the region close to the cathode and expands from this constriction zone towards the anode (3). The spray material (SM) is supplied with the aid of a carrier gas (TG) through a central tube (24) which opens in the centre of an inlet nozzle which is formed by the neutrode (5) located closest to the cathode. <??>Using this solution, a higher efficiency and an increased life of the plasma spray gun can be achieved. <IMAGE>

IPC 1-7

**H05H 1/34**; **H05H 1/42**

IPC 8 full level

**B05B 7/22** (2006.01); **C23C 4/12** (2006.01); **H05H 1/34** (2006.01); **H05H 1/42** (2006.01)

CPC (source: EP US)

**H05H 1/34** (2013.01 - EP US); **H05H 1/3436** (2021.05 - EP); **H05H 1/3452** (2021.05 - EP); **H05H 1/3484** (2021.05 - EP); **H05H 1/42** (2013.01 - EP US); **H05H 1/3436** (2021.05 - US); **H05H 1/3452** (2021.05 - US); **H05H 1/3484** (2021.05 - US)

Citation (examination)

- WO 9015516 A1 19901213 - SUENNEN JEAN [BE]
- WO 9003095 A1 19900322 - COMMW SCIENT IND RES ORG [AU], et al
- WO 9105449 A1 19910418 - CENTRE NAT RECH SCIENT [FR]
- DE 1932150 U 19660203 - SIEMENS AG [DE]
- Rutscher/Deutsch: Plasmatechnik, Seiten 244, 245, 262, 263

Cited by

EP0851720A1; CH712835A1; EP0596830A1; DE9215133U1; WO9716947A1; EP2147582B1; EP1801256B2

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DOCDB simple family (application)

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