

## Title (en)

Device for the pneumatic stabilisation of a continuously running metallic strip

## Title (de)

Vorrichtung zur pneumatischen Stabilisierung eines kontinuierlich laufenden Metallbandes

## Title (fr)

Dispositif pour la stabilisation pneumatique d'une bande métallique en défilement continu

## Publication

**EP 1728888 A1 20061206 (FR)**

## Application

**EP 06447053 A 20060413**

## Priority

BE 200500277 A 20050602

## Abstract (en)

The pneumatic stabiliser, designed to deliver a gas such as air, nitrogen or carbon dioxide under pressure to at least one side of a continuously-running metal strip (1), especially a steel strip leaving a hot galvanising bath of molten zinc (2), consists of a housing (5) with at least two transverse gas outlet slits (6) covering the width of the strip with the space between the slits covered by a perforated plate (8). The plate covers a housing cavity (7) with side walls (17) and a back (27), containing a moving plate (9) connected to a passive damper (10) essentially in the form of a damped harmonic oscillator. The gas flows from the slits can be delivered perpendicular or at an oblique angle to the moving strip's surface.

## IPC 8 full level

**C23C 2/16** (2006.01); **C23C 2/36** (2006.01)

## CPC (source: EP US)

**C23C 2/003** (2013.01 - EP US); **C23C 2/20** (2013.01 - EP); **C23C 2/5245** (2022.08 - EP US)

## Citation (applicant)

- JP S56153136 A 19811127 - NIPPON STEEL CORP
- JP S5684452 A 19810709 - NIPPON STEEL CORP
- JP H10298728 A 19981110 - NIPPON KOKAN KK
- JP H051362 A 19930108 - NIPPON KOKAN KK
- JP H09143652 A 19970603 - KAWASAKI STEEL CO
- JP H1087755 A 19980407 - MITSUBISHI CHEM CORP
- JP H0810847 A 19960116 - MITSUBISHI HEAVY IND LTD

## Citation (search report)

- [A] GB 2334351 A 19990818 - BRITISH STEEL PLC [GB]
- [XA] PATENT ABSTRACTS OF JAPAN vol. 004, no. 173 (C - 032) 29 November 1980 (1980-11-29)
- [XDA] PATENT ABSTRACTS OF JAPAN vol. 005, no. 152 (C - 073) 25 September 1981 (1981-09-25)
- [AD] PATENT ABSTRACTS OF JAPAN vol. 006, no. 036 (M - 115) 5 March 1982 (1982-03-05)
- [AD] PATENT ABSTRACTS OF JAPAN vol. 006, no. 186 (C - 126) 22 September 1982 (1982-09-22)
- [A] PATENT ABSTRACTS OF JAPAN vol. 2003, no. 05 12 May 2003 (2003-05-12)

## Cited by

CN114411079A

## Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

## Designated extension state (EPC)

AL BA HR MK YU

## DOCDB simple family (publication)

**EP 1728888 A1 20061206**; **EP 1728888 B1 20080813**; AT E404707 T1 20080815; BE 1016623 A4 20070306; DE 602006002174 D1 20080925; ES 2312103 T3 20090216

## DOCDB simple family (application)

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