

Title (en)

Compressed gas quenching of shafts

Title (de)

Druckgasabschreckung von wellenförmigen Werkstücken

Title (fr)

Trempe a gaz comprime pour arbres

Publication

**EP 1123757 B1 20050413 (DE)**

Application

**EP 01100775 A 20010113**

Priority

DE 10005969 A 20000209

Abstract (en)

[origin: DE10005969C1] Machine for directing and hardening a corrugated longitudinal workpiece (50) comprises a receiving device for the workpiece; several rotating lower rollers with directing points (4-9); upper rollers arranged on the directing points; and a drive for the workpiece and a workpiece quenching device. A chamber (60) surrounding the receiving device and the lower rollers is connected to the workpiece so that cold gas can be introduced via nozzles. Preferred Features: The cold gas nozzles are arranged in rows.

IPC 1-7

**B21D 3/02**

IPC 8 full level

**B21D 3/02** (2006.01); **B21D 3/16** (2006.01); **C21D 1/613** (2006.01); **C21D 9/28** (2006.01)

CPC (source: EP)

**B21D 3/16** (2013.01); **C21D 1/613** (2013.01); **C21D 9/28** (2013.01)

Designated contracting state (EPC)

DE ES FR IT SE

DOCDB simple family (publication)

**DE 10005969 C1 20010705**; CZ 2001467 A3 20020313; CZ 297750 B6 20070321; DE 50105871 D1 20050519; EP 1123757 A2 20010816; EP 1123757 A3 20020116; EP 1123757 B1 20050413; ES 2239070 T3 20050916

DOCDB simple family (application)

**DE 10005969 A 20000209**; CZ 2001467 A 20010206; DE 50105871 T 20010113; EP 01100775 A 20010113; ES 01100775 T 20010113