

Title (en)

SLIT NOZZLE FOR SPRAYING A CONTINUOUS CASTING PRODUCT WITH A COOLING LIQUID

Title (de)

SCHLITZDÜSE ZUM BESPRÜHEN EINES STRANGGUSSPRODUKTES MIT EINER KÜHLFLÜSSIGKEIT

Title (fr)

BOSE A JET EVENTAIL DESTINEE A PULVERISER UN LIQUIDE DE REFROIDISSEMENT SUR UN PRODUIT DE COULEE CONTINUE

Publication

EP 1047504 B1 20011024 (DE)

Application

EP 98959851 A 19981105

Priority

- CH 263997 A 19971114
- EP 9807069 W 19981105

Abstract (en)

[origin: US6360973B1] The spray nozzle comprises a mixing chamber into which a liquid, forming a first and a second liquid stream, can flow through two inlet openings and which comprises an outlet opening, disposed downstream, for a spray jet. A mixing chamber wall acts as a guide surface for the liquid streams and is shaped at the outlet opening such that the liquid streams meet at an angle at the outlet opening and then form the spray jet. Given an angle of impact of approximately 90°, this spraying process delivers droplets with a high level of kinetic energy and a broad uniform fan-out of the droplet paths. Large areas can therefore be uniformly sprayed with the spray nozzle from a considerable distance.

IPC 1-7

B05B 1/04

IPC 8 full level

B05B 1/04 (2006.01); **B21B 45/02** (2006.01); **B22D 11/124** (2006.01); **C21D 1/667** (2006.01); **B05B 1/26** (2006.01)

CPC (source: EP US)

B05B 1/04 (2013.01 - EP US); **B05B 1/042** (2013.01 - EP US); **B21B 45/0233** (2013.01 - EP US); **B22D 11/1246** (2013.01 - EP US); **C21D 1/667** (2013.01 - EP US); **B05B 1/26** (2013.01 - EP US)

Cited by

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WO 9925481 A1 19990527; AT E207389 T1 20011115; AU 1560599 A 19990607; AU 733220 B2 20010510; BR 9814137 A 20001003; CA 2308507 A1 19990527; CA 2308507 C 20120110; CN 1107551 C 20030507; CN 1278748 A 20010103; CZ 20001760 A3 20010314; CZ 295473 B6 20050817; DE 59801901 D1 20011129; DK 1047504 T3 20020218; EP 1047504 A1 20001102; EP 1047504 B1 20011024; ES 2165708 T3 20020316; JP 2001523554 A 20011127; PL 194516 B1 20070629; PL 340464 A1 20010212; PT 1047504 E 20020429; RU 2213627 C2 20031010; TR 200001364 T2 20001121; TW 477722 B 20020301; UA 49098 C2 20020916; US 6360973 B1 20020326; ZA 9810418 B 19990514

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