

Title (en)

Apparatus for cooling a moving chill substrate.

Title (de)

Einrichtung für das Kühlen eines der Schnellkühlung dienenden umlaufenden Trägerbandes.

Title (fr)

Appareil pour le refroidissement d'un substrat en mouvement qui sert au refroidissement rapide.

Publication

**EP 0081117 A1 19830615 (EN)**

Application

**EP 82110656 A 19821118**

Priority

US 32767581 A 19811204

Abstract (en)

A cooling apparatus and related method for a continuous casting apparatus includes a series of spray nozzles (42) for spraying a coolant against one surface of a moving chill substrate (14). The apparatus includes an enclosure (40) having vacuum applied thereto for preventing migration of the sprayed coolant from the surface against which it is sprayed to the surface contacting the molten solidifying material (30). Any coolant having a tendency to escape along sealed edges of the enclosure is forced back into the enclosure by the pressure gradient. The edges are sealed by elongated plastic rods. Additionally, scrapers are provided for removing remanent coolant from the sprayed surface. The coolant is sprayed at a high velocity to increase its heat transferring efficiency.

IPC 1-7

**B22D 11/06**; B22D 11/16; B22D 11/124

IPC 8 full level

**B22D 11/06** (2006.01)

CPC (source: EP)

**B22D 11/0685** (2013.01)

Citation (search report)

- [A] DE 2729425 A1 19790111 - LAREX AG RECH
- [A] DE 2729431 A1 19790111 - LAREX AG RECH
- [A] DE 2709540 A1 19780907 - LAREX AG RECH
- [A] GB 2065520 A 19810701 - PROPERZI G
- [AD] US 3976117 A 19760824 - OLSSON ERIK ALLAN

Cited by

CN110076308A; US4721152A; WO9926744A1

Designated contracting state (EPC)

DE FR GB IT NL SE

DOCDB simple family (publication)

**EP 0081117 A1 19830615**; CA 1192017 A 19850820; JP S58151945 A 19830909; JP S6051935 B2 19851116

DOCDB simple family (application)

**EP 82110656 A 19821118**; CA 416972 A 19821203; JP 21259282 A 19821203