Title (en)

Process and apparatus for continuously casting a strand of stainless austenitic steel on a moving wall or in between two moving walls whose surfaces are provided with indentations

Title (de)

Verfahren und Vorrichtung zum Stranggiessen von rostfreiem austenitischem Stahl zwischen zwei beweglichen Wänden oder auf einer beweglichen Wand mit Dellen

Title (fr)

Procédé de coulée continue d'une bande d'acier inoxydable austenitique sur une ou entre deux parois mobiles dont les surfaces sont pourvues de fossettes, et installation de coulée pour sa mise en oeuvre

Publication

EP 0796685 B1 19990915 (FR)

Application

EP 97400539 A 19970312

Priority

FR 9603545 A 19960322

Abstract (en)

[origin: EP0796685A1] Austenitic stainless steel is continuously cast to form a thin band on one or between two moving walls with dimpled surfaces and under a blanket of inert gas of controlled composition which is at least partly soluble in the steel, the dimples being interconnected and having diameters 100-1500, preferably 700-1500 mu m and depth 20-150, preferably 80-120 mu m. The steel comprises (wt.%): 17.0-20.0 chromium, 8.0-10.5 nickel and up to 0.08 carbon, 1 silicon, 2 manganese, 0.045 phosphorous and 0.030 sulphur.The ratio A/B is over 1.55, preferably 1.55-1.70, where A=%Cr+1.37 %molybdenum+1.5 %Si+2 %niobium+3 %titanium and B=%Ni+0.31 %Mn+22 %C+14.2 %nitrogen+%copper. Also claimed is a casting device comprising one or two cooled moving walls having said dimples and with a system for controlling the atmosphere therein.

IPC 1-7

B22D 11/06; C22C 38/40

IPC 8 full level

B22D 11/00 (2006.01); **B22D 11/04** (2006.01); **B22D 11/06** (2006.01); **B22D 11/10** (2006.01); **B22D 11/106** (2006.01); **B22D 11/12** (2006.01); **B22D 11/14** (2006.01); **C22C 38/00** (2006.01); **C22C 38/40** (2006.01); **C22C 38/58** (2006.01)

CPC (source: EP US)

B22D 11/0648 (2013.01 - EP US); **B22D 11/0697** (2013.01 - EP US); **C22C 38/40** (2013.01 - EP US)

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