

Title (en)
Metallic tubes and method and apparatus for their production

Title (de)
Metallrohre und Verfahren und Anlage zu deren Herstellung

Title (fr)
Tubes métalliques et procédé et installation pour les fabriquer

Publication
EP 0857529 A1 19980812 (FR)

Application
EP 98400079 A 19980116

Priority
FR 9701440 A 19970207

Abstract (en)
The metal tubes e.g. copper alloys are obtained by continuous or semi-continuous gravity casting of a tube blank and then the cold drawing of this blank. Also claimed is an installation for the manufacture of the tubes, comprising (a) a set of equipment for casting the tube blank consisting of a reservoir (12) for liquid metal with an opening in its bottom in which a mandrel (14) is engaged, a mould (13) in which the metal is solidified, an electromagnetic stirring annulus (15), a cooling annulus (16) and an extraction system (18) and (b) a cold drawing and heat treatment assembly made up of a drawing machine, a drawing bench and a reheating furnace.

Abstract (fr)
Cette installation de fabrication de tubes métalliques comprend un réservoir (12) dont le fond comporte une ouverture dans laquelle est engagé un mandrin (14), une lingotière (13) entourant le mandrin, un anneau de brassage électromagnétique (15), un anneau de refroidissement (16) et un système d'extraction (18). <IMAGE>

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B22D 11/00

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Citation (search report)

- [X] US 5279353 A 19940118 - NIELSEN SR WILLIAM D [US], et al
- [A] US 4000773 A 19770104 - SEVASTAKIS GUS
- [A] EP 0615794 A1 19940921 - KABELMETAL AG [DE]
- [A] US 4616500 A 19861014 - ALEXOFF RANDALL L [US]
- [A] PATENT ABSTRACTS OF JAPAN vol. 009, no. 084 (M - 371) 13 April 1985 (1985-04-13)

Cited by
CN109127772A; EP2202015A1; US11179771B2; WO2013020241A1; WO2008072787A3; US8336604B2; US8869874B2

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