

Title (en)
CONVECTION COOLING VESSEL FOR MATERIALS EXHIBITING SURFACES

Publication
EP 0315590 A3 19910522 (DE)

Application
EP 88810733 A 19881026

Priority
DE 3737254 A 19871103

Abstract (en)
[origin: EP0315590A2] A convection cooling vessel for materials exhibiting surfaces in arrangements with interspaces which can be flowed through, in particular of block charges made of light metal semifinished products, has a fan which delivers into an exhaust duct and on the suction side of which a forked pipe is arranged; on each leg of the forked pipe, there is a shut-off and control valve. Provided symmetrically in relation to the material are inflow ducts which are assigned to the legs of the forked pipe. Each inflow duct has a further shut-off and control valve. The shut-off and control valves in the forked pipe and in the inflow ducts can be adjusted in such a manner that, because of the suction effect of the fan, the material can be flowed through in the main flow or in the part flow and the flow direction of the cooling medium can be reversed. <IMAGE>

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Citation (search report)
• [X] US 2619341 A 19521125 - JOHN WALLERIUS
• [X] DE 2122964 B2 19720803
• [A] BE 850200 A 19770502 - COBELCOMEX
• [A] US 4395233 A 19830726 - SMITH ROBERT C, et al
• [A] US 4408986 A 19831011 - SORAYA SORAYAPOUR [DE], et al
• [A] EP 0129701 A1 19850102 - SCHMETZ INDUSTRIEOFENBAU UND V [DE]
• [A] DE 3441289 A1 19851031 - SCHNEIDER ROHRLEITUNG PAUL [DE]

Cited by
EP2103695A1

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AT CH DE FR LI NL

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