

Title (en)  
METHOD AND APPARATUS FOR INDIRECT EVAPORATION COOLING

Publication  
**EP 0388471 A4 19910717 (EN)**

Application  
**EP 89907385 A 19880826**

Priority  
SU 8800170 W 19880826

Abstract (en)  
[origin: EP0388471A1] An: indirect evaporative cooling method and apparatus, e.g. for a heat exchanger system, consists of passing the medium to be cooled through a dry channel in contact with one heat exchanging surface and cooling gas through another dry channel in contact with a second heat exchanging surface, with a return flow through a moist channel of the same length as the dry one by means of suction. The apparatus comprises a housing (12) with outlets and inlets for the medium to be cooled and the cooling gas, containing a capillary-porous material (10) in which the through moist channels (22) and dry channels (23, 24) are located. Channels (22, 24) are linked to one another and to an outlet duct (17) containing an extractor fan (32) to intensify the cooling process. The cooled substance passes along a dry channel (23) and on to a consumer. At the same time the cooling gas passes directly along a dry channel (24) and then turned through 180 deg. to pass back along a moist channel, through which is drawn by the extractor fan.

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**F28C 3/02**

IPC 8 full level  
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**F24F 1/0007** (2013.01 - EP); **F24F 1/0059** (2013.01 - EP US); **F24F 5/0035** (2013.01 - EP); **F28C 3/02** (2013.01 - EP); **F28C 3/08** (2013.01 - EP); **F28D 5/00** (2013.01 - EP); **Y02B 30/54** (2013.01 - EP)

Citation (search report)  
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Designated contracting state (EPC)  
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