

Title (en)

Device and method for cooling oil

Title (de)

Vorrichtung und Verfahren zum Kühlen von Öl

Title (fr)

Dispositif et procédé de refroidissement d'huile

Publication

EP 2428655 A1 20120314 (EN)

Application

EP 10175742 A 20100908

Priority

EP 10175742 A 20100908

Abstract (en)

The present disclosure relates to a method and a device for cooling oil, e.g. lubricating or hydraulic oil. The method involves feeding oil to a primary circuit of a heat exchanger (1,3), and feeding cooling water to a secondary circuit of the heat exchanger in order to cool the oil. In the secondary circuit, a sub-atmospheric pressure is maintained, such that the cooling water boils in the secondary circuit, even if the temperature of the incoming oil is relatively low, resulting in a water-steam mixture. The method further involves separating the water-steam mixture in order to provide process steam, which may be used for other purposes, thereby recovering a considerable portion of the thermal energy in the oil.

IPC 8 full level

F01K 13/00 (2006.01); **F01K 15/00** (2006.01)

CPC (source: EP)

F01K 13/00 (2013.01); **F01K 15/00** (2013.01)

Citation (search report)

- [A] WO 2010070703 A1 20100624 - JAPAN COPPER DEV ASS [JP], et al
- [A] DE 202006017581 U1 20070125 - BRUECKNER JUERGEN [DE], et al

Citation (examination)

- DE 10151457 A1 20030430 - VOITH PAPER PATENT GMBH [DE]
- US 3227499 A 19660104 - WHITTUM WARREN C

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EP3102876A4

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

Designated extension state (EPC)

BA ME RS

DOCDB simple family (publication)

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