

Title (en)

UTILISATION OF THE HEAT CONTAINED IN A COOLING FLUID

Title (de)

NUTZUNG DER IN EINEM KÜHLFLUID ENTHALTENEN WÄRME

Title (fr)

UTILISATION DE LA CHALEUR CONTENUE DANS UN FLUIDE DE REFROIDISSEMENT

Publication

EP 3030364 A1 20160615 (DE)

Application

EP 14747338 A 20140725

Priority

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- EP 2014066090 W 20140725

Abstract (en)

[origin: WO2015018673A1] A plant part (1 to 4) of a primary industry plant and/or a material (5) processed in the plant is cooled with a fluid (6). The fluid (6) is heated by the cooling of the plant part (1 to 4) and/or of the material (5) processed in the plant from a starting temperature (T1) to an end temperature (T2). Heat contained in the heated fluid (6) is used for preheating a material (5) to be processed subsequently in the plant and/or for preheating a process fluid (7, 8) used in the plant. The heat contained in the heated fluid (6) is fed to the material (5) to be processed subsequently in the plant and/or to the process fluid (7, 8) by means of a heat exchanger (10). The heat contained in the heated fluid (6) is initially emitted to an intermediate medium (11) in the heat exchanger (10). The material (5) to be processed subsequently in the plant and/or the process fluid (7, 8) used in the plant is heated by means of the intermediate medium (11). The heat contained in the heated fluid (6) is transferred by means of a transfer circuit (12) of the heat exchanger (10) and a heat pump (13) arranged in the transfer circuit (12) to the intermediate medium (11). The intermediate medium (11) is heated by means of the heat exchanger (10) to a heating temperature (T3) above the temperature at which the fluid (6) enters the heat exchanger (10).

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

See references of WO 2015018673A1

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