

Title (en)
COMBINED HYDROELECTRIC-THERMOELECTRIC POWER PLANT

Title (de)
KOMBINIERTES HYDROELEKTRISCH-THERMOELEKTRISCHES KRAFTWERK

Title (fr)
CENTRALE ÉLECTRIQUE HYDROÉLECTRIQUE-THERMOÉLECTRIQUE COMBINÉE

Publication
EP 2694802 A1 20140212 (EN)

Application
EP 11711913 A 20110404

Priority
EP 2011055197 W 20110404

Abstract (en)
[origin: WO2012136243A1] The invention refers to a combined hydroelectric- thermoelectric power plant, wherein a hydroelectric power plant (1) is thermally coupled to a thermoelectric power plant (2) in order to recover waste heat produced in the hydroelectric power plant (1) for electricity generation. A fraction of the water that propels the turbines (8) in the hydroelectric power plant (1) is used as a heat sink. A thermoelectric generator is integrated in the heat-conducting wall (16) of a lubricant oil-water heat exchanger (11) so that a large temperature gradient across thermoelectric elements (21, 22) of the thermoelectric generator, and therefore a high efficiency can be obtained.

IPC 8 full level
F03B 13/00 (2006.01); **H10N 10/13** (2023.01)

CPC (source: EP)
F03B 13/00 (2013.01); **H10N 10/13** (2023.02); **F05B 2220/60** (2013.01); **F05B 2260/20** (2013.01); **Y02B 10/50** (2013.01); **Y02E 20/14** (2013.01)

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 RS SE SI SK SM TR

DOCDB simple family (publication)
WO 2012136243 A1 20121011; EP 2694802 A1 20140212

DOCDB simple family (application)
EP 2011055197 W 20110404; EP 11711913 A 20110404