

Title (en)

METHOD FOR UTILIZING THE WASTE HEAT OF INTERNAL COMBUSTION ENGINES

Title (de)

VERFAHREN ZUR NUTZUNG DER ABWÄRME VON VERBRENNUNGSKRAFTMASCHINEN

Title (fr)

PROCÉDÉ DE RÉCUPÉRATION DE LA CHALEUR PERDUE DE MOTEURS À COMBUSTION INTERNE

Publication

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Application

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Abstract (en)

[origin: WO2011023283A2] The invention relates to a method for utilizing the waste heat of large internal combustion engines with the goal of increasing the yield of technical work such that said engines can be operated economically independently of the demand for thermal and process heat. The goal is achieved by a novel coupling of the internal combustion engine to gas and steam turbine power processes, characterized in that the pressure gradient of the engine exhaust gas to the ambient pressure is fully utilized, and the engine and oil are cooled forming saturated steam is achieved, taking flow losses into account. The saturated steam is overheated by the exhaust gas cooled down by expansion, and is subsequently expanded and condensed in a steam power process giving off technical work.

IPC 8 full level

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