

Title (en)
HEAVY-DUTY VEHICLE COMPRISING A COMBUSTION ENGINE

Title (de)
SCHWERLASTFAHRZEUG MIT EINEM VERBRENNUNGSMOTOR

Title (fr)
VÉHICULE LOURD COMPRENANT UN MOTEUR À COMBUSTION

Publication
EP 3839221 A1 20210623 (EN)

Application
EP 19217690 A 20191218

Priority
EP 19217690 A 20191218

Abstract (en)
A heavy-duty vehicle (1) comprises an ORC system for waste heat recovery out of flue gas exhausted by the vehicle's combustion engine. The ORC system comprises a condensor (3) which is arranged in the slipstream of the vehicle's base structure (7). The overall width W of the condensor is in the range between 1.0 m and 3.0 m, the overall height H of the condensor is in the range between 1.0 m and 4.0 m, while the overall depth D of the condensor is in the range between 0.05W and 0.30W and in the range between 0.05H and 0.30H. Air-intake and air-outlet openings of the condensor are configured for realizing buoyancy flow of environmental air through the condensor. Thanks to the condensor's location, dimensions and configuration considerable improvements in energy savings are obtained as compared to previously proposed ORC systems for heavy-duty vehicles.

IPC 8 full level
F01K 23/06 (2006.01); **F01K 9/00** (2006.01)

CPC (source: EP)
F01K 23/065 (2013.01); **F01K 9/003** (2013.01)

Citation (search report)
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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

Designated extension state (EPC)
BA ME

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DOCDB simple family (application)
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