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(54) Title: HEAT ENGINE AND METHOD OF MANUFACTURE

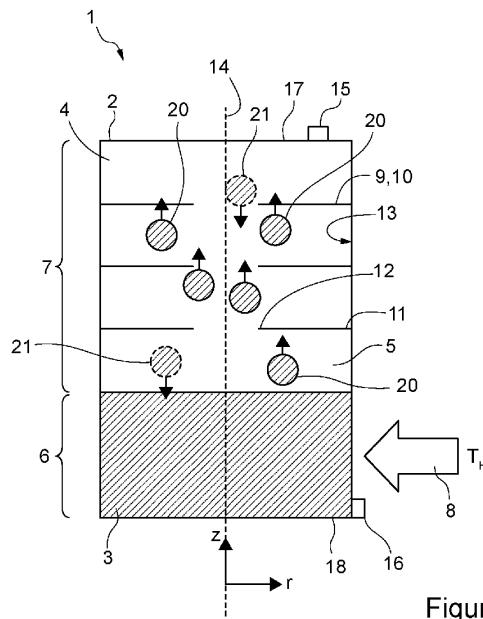


Figure 3

(57) Abstract: A heat engine is disclosed. The heat engine comprises a housing (1), a first liquid (3) and a second liquid (4) located within the housing (1). The first liquid (3) has a higher density and lower boiling point than the second liquid (4). The heat engine further comprises a heat exchanger (6) which transfers heat to the first liquid (3) to evaporate the first liquid (3) to form a first liquid vapour (20). The heat engine also comprises at least one fluid flow member (9) which moves in response to a fluid flow created by the interaction of the first liquid vapour (20) and the second liquid (4). The liquid-gas phase change of the first fluid provides an alternative mechanism for converting heat into work with numerous advantages. The heat engine has minimal moving parts, a relatively long lifetime, does not require a specific fuel, does not directly release toxic or un-environmentally friendly gases, and can be adapted to a specific source of waste heat.

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