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(54) **A unitary heat pump air conditioner having a heat exchanger with an integral accumulator**

(57) The disclosure relates to a unitary heat pump air conditioner (Unitary HPAC) having a plate type exchanger assembly, an electrically driven compressor, and coolant pumps. The plate heat exchanger assembly includes a plurality of plates stacked and hermetically sealed between an upstream end plate and a downstream end plate. The stacked plates define a condenser/chiller portion adjacent the upstream end plate, an accumulator portion adjacent the downstream end plate,

and an evaporator/chiller portion sandwiched between the condenser/chiller portion and the accumulator portion. A refrigerant passageway extends through the plate type heat exchanger assembly, a hot coolant passageway extends through the condenser/chiller portion, and a cold coolant passageway extends through the evaporator/chiller portion. The cold coolant passageway and the hot coolant passageway are in non-contact thermal communication with the refrigerant passageway.

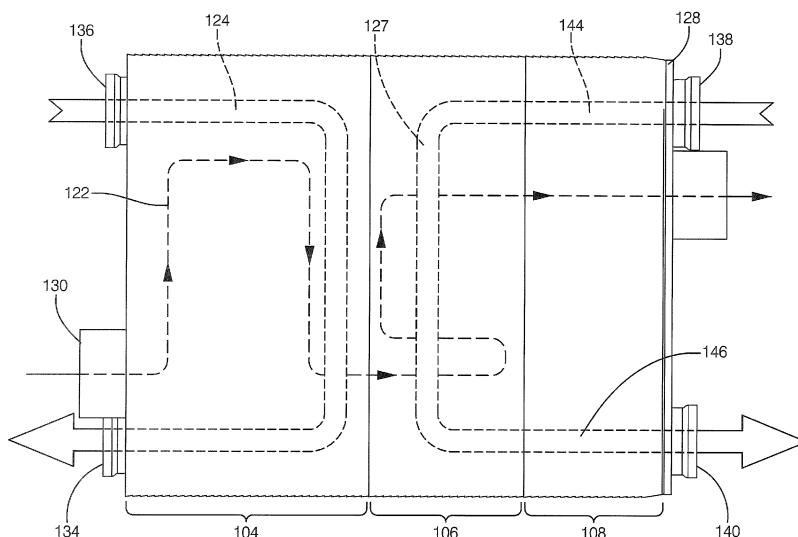


FIG. 4



EUROPEAN SEARCH REPORT

Application Number
EP 13 15 5505

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			TECHNICAL FIELDS SEARCHED (IPC)
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The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 26 April 2016	Examiner de Graaf, Jan Douwe
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
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