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(54) **An integrated heat exchanger and a method of assembling thereof**

(57) The invention relates to an integrated heat exchanger (1), in particular a vehicle radiator-condenser integrated module, comprising two heat exchangers (2, 3), each having a cooling core comprised of fins (23, 33) and tubes (22, 32), two header tanks (21, 31) fluidly connected with reciprocal ends of cooling core tubes, where said heat exchangers (2, 3) are coupled and parallel to each other. To enable detaching of heat exchangers forming the integrated module, top ends of the header tanks (21) of the radiator (2) are provided with top end caps (4) having projections (41) with openings (43) adapted to receive the top ends of the header tanks (31) of the condenser (3); bottom ends of the header tanks (21) of the radiator (2) are provided with bottom end caps (5) having projections (51) with sockets (53) adapted to receive the bottom ends of the header tanks (31) of the condenser (3); where the bottom ends of the header tanks (31) of the condenser (3) are supported on retaining rings (52) resting in sockets (53) of the projections (51) of the bottom end caps (5); and the top ends of the header tanks (31) of the condenser (3), are locked with retaining plugs (42) pushed upwardly into the openings (43) of the projections (41) of the top end caps (4). The invention relates also to a method of assembling such integrated heat exchanger.

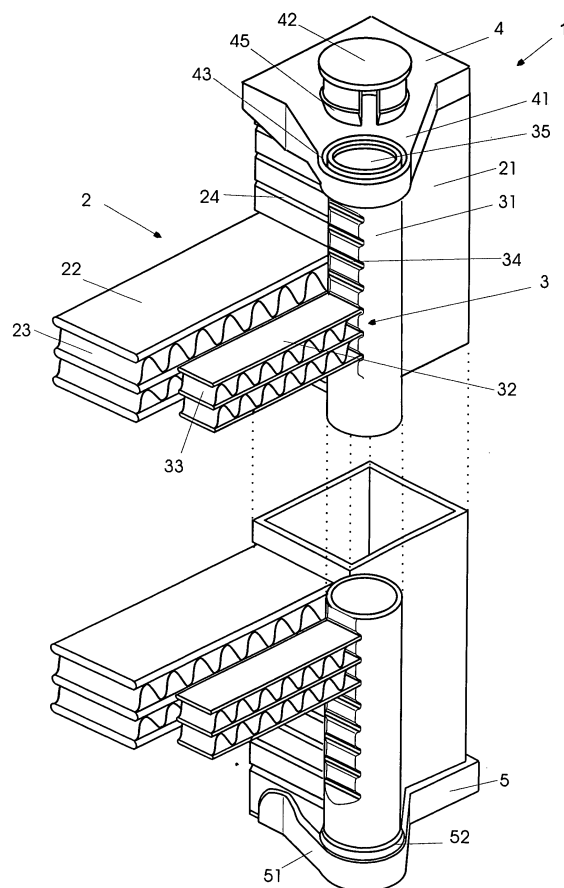


Fig 1



EUROPEAN SEARCH REPORT

Application Number
EP 04 46 0028

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	JP 2002 257494 A (CALSONIC KANSEI CORP) 11 September 2002 (2002-09-11) * abstract; figures *	1-8	INV. F28D1/04 F28F9/02
A	US 6 364 005 B1 (MAKINO KENJI [JP] ET AL) 2 April 2002 (2002-04-02) * figure 9 *	1-8	
			TECHNICAL FIELDS SEARCHED (IPC)
			F28D F28F
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 25 March 2009	Examiner Mellado Ramirez, J
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			

1
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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 04 46 0028

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The members are as contained in the European Patent Office EDP file on
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25-03-2009

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