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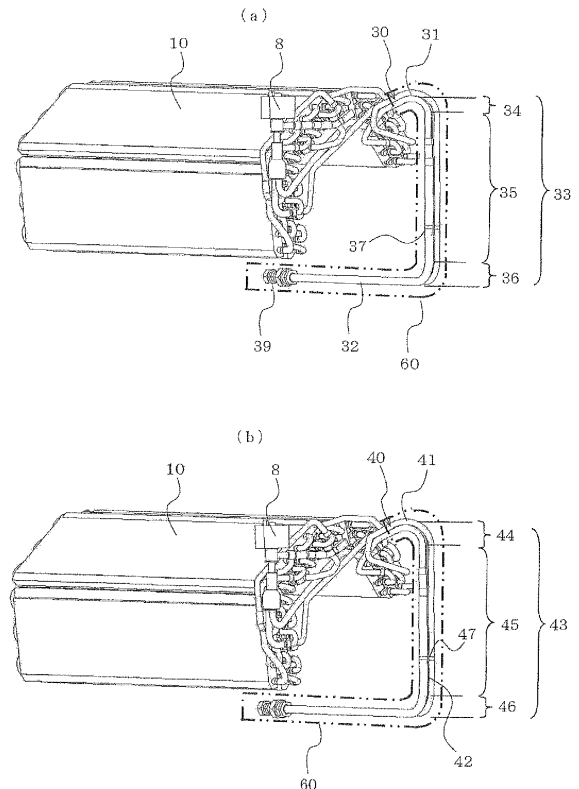
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(54) **Heat exchanger and air-conditioning apparatus having the same**

(57) It is an objective to achieve suppressing progress of electrolytic corrosion (galvanic corrosion) by aluminum or an aluminum alloy caused by diffusion of copper ions to a connection pipe formed of aluminum or an aluminum alloy. The copper ions are diffused through water having condensed and staying in a small gap between the thermally insulating material and the connection pipe.

In a gas pipe 30 and a liquid pipe 40 of a connection pipe unit 20, connection portions 37 and 47, in which aluminum pipes 31 and 41 (first refrigerant pipes: refrigerant pipes formed of aluminum or an aluminum alloy) and copper pipes 32 and 42 (second refrigerant pipes: refrigerant pipes formed of copper or a copper alloy) are respectively connected to each other, are disposed in fall portions of the aluminum pipes 31 and 41. The connection pipe unit 20 is covered with a thermally insulating material 60. An anti-corrosion treatment is applied to the aluminum pipes 31 and 41 covered with the thermally insulating material 60.

FIG. 2



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EUROPEAN SEARCH REPORT

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Place of search		Date of completion of the search	Examiner
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X : particularly relevant if taken alone		T : theory or principle underlying the invention	
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**ANNEX TO THE EUROPEAN SEARCH REPORT
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5 This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
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