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(54) Title: AIR CONDITIONING SYSTEM AND AUTOMOBILE

(54) 发明名称: 空调系统和汽车

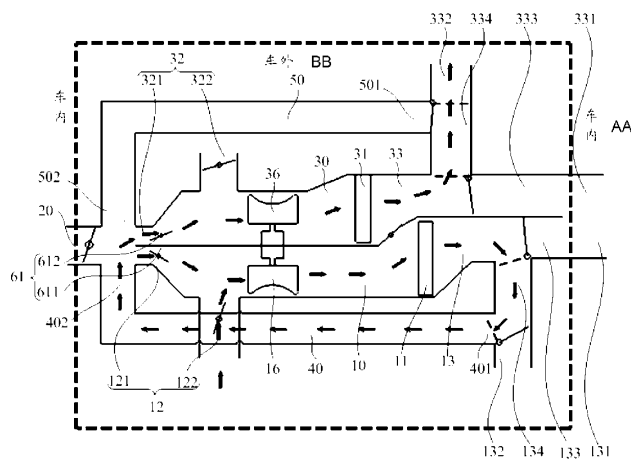


图 1

AA Interior of automobile

BB Exterior of automobile

(57) Abstract: An air conditioning system. A first heat exchange air duct (10) of the air conditioning system is internally provided with a condenser (11); a first air inlet end (12) of the first heat exchange air duct (10) comprises a first air inlet (121) communicated with a circulating air inlet (20) in an automobile and a second air inlet (122) communicated with the exterior of the automobile; and a first air outlet end (13) of the first heat exchange air duct (10) is separately communicated with a first air outlet (131) communicated with the interior of the automobile and a second air outlet (132) communicated with the exterior of the automobile. A second heat exchange air duct (30) is internally provided with an evaporator (31); a second air inlet end (32) of the second heat exchange air duct (30) comprises

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a third air inlet (321) communicated with the circulating air inlet in the automobile and a fourth air inlet (322) communicated with the exterior of the automobile; and a second air outlet end (33) of the second heat exchange air duct (30) is separately communicated with a third air outlet (331) communicated with the interior of the automobile and a fourth air outlet (332) communicated with the exterior of the automobile. A first circulating air duct (40) is used for recycling a gas subjected to heat exchange via the first heat exchange air duct and conveying the gas to the first air inlet and/or the third air inlet. A second circulating air duct (50) is used for recycling a gas subjected to heat exchange via the second heat exchange air duct and conveying the gas to the first air inlet and/or the third air inlet. The present application further relates to an automobile having the air conditioning system installed. According to the air conditioning system, the heating or cooling rate is increased, and the time required for changing the temperature in the automobile into a comfortable temperature is shortened, thereby improving the riding experience of a user.

(57) 摘要: 一种空调系统, 该空调系统的第一换热风道(10)内置有冷凝器(11), 且其第一进风端(12)包括连通车内的循环风进口(20)的第一进风口(121)与连通车外的第二进风口(122), 第一出风端(13)分别连通连通车内的第一出风口(131)与连通车外的第二出风口(132)。第二换热风道(30)内置有蒸发器(31), 且其第二进风端(32)包括连通车内循环风进口的第三进风口(321)与连通车外的第四进风口(322), 第二出风端(33)分别连通连通车内的第三出风口(331)与连通车外的第四出风口(332)。第一循环风道(40)用于回收经由第一换热风道换热后的气体, 并将其输送至第一进风口和/或第三进风口。第二循环风道(50)用于回收经由第二换热风道换热后的气体, 并将其输送至第一进风口和/或第三进风口。以及安装有该空调系统的汽车。该空调系统提高了升温或降温速率, 减少了车内温度变为舒适温度所需时间, 提高了用户的乘车体验。