CLAIMS

1. An air conditioning circuit for a vehicle comprising a compressor (107), a condenser (108), and an evaporator (109), wherein a heat exchanger (100) is incorporated between the outlet of the evaporator (109) and the inlet of the compressor (107), the heat exchanger having a cooling chamber (101) with an inlet (103) for receiving cooled refrigerant from the evaporator (109) and a first outlet (104) for returning refrigerant to the compressor (107), the inlet (103) and the first outlet (104) being connected by tubing passing through the chamber (101), an opening (112) for admission of ambient air into chamber (101) to be cooled by heat exchange with the refrigerant flowing through the tubing and a second outlet (106) for passing air cooled by the refrigerant to the engine (110), characterised in that a second chamber (105) is directly coupled to the heat exchanger chamber (101) and the second outlet (106) exits from the second chamber (105).

2. An apparatus according to claim 1, wherein the cooling chamber (101) is any one of a finned-tube heat exchange, a plate heat exchanger or a plate fin heat exchanger.

3. A system (200) for passing cooled air to the engine of a motor vehicle comprising an air conditioning circuit, according to claim 1 or claim 2 coupled to the engine.

4. A motor vehicle incorporating a system according to claim 3.