

Title (en)

ELECTROMAGNETIC INDUCTION HEATING UNIT AND AIR CONDITIONING DEVICE

Title (de)

ELEKTROMAGNETISCHE INDUKTIONSERWÄRMUNGSEINHEIT UND KLIMAANLAGEEINRICHTUNG

Title (fr)

UNITÉ DE CHAUFFAGE PAR INDUCTION ÉLECTROMAGNÉTIQUE ET DISPOSITIF DE CLIMATISATION

Publication

**EP 2381740 A1 20111026 (EN)**

Application

**EP 09837460 A 20091225**

Priority

- JP 2009007240 W 20091225
- JP 2009001931 A 20090107

Abstract (en)

The present invention solves the problem of how to provide an electromagnetic induction heating unit and an air conditioner that, even if a magnetic field is generated by an electromagnetic induction heating unit when performing electromagnetic induction heating, the amount of the magnetic field that leaks to the portions outside of the refrigerant piping can be kept small. An electromagnetic induction heating unit (6) heats a refrigerant piping (F) through electromagnetic induction heating, and comprises: a coil (68), a shielding cover (75), and a ferrite part (98, 99). The coil (68) is disposed in the vicinity of the refrigerant piping (F). The shielding cover (75) is disposed around the refrigerant piping (F) and includes a magnetic body. The ferrite part (98, 99) is disposed on the outer side of the coil (68), which is the opposite side of the inner side, namely, the refrigerant piping (F) side, of the coil (68), and on the inner side of the shielding cover (75) and contains a magnetic material whose magnetic permeability is higher than that of the shielding cover (75). Both end parts of the shielding cover (75) in the directions in which the refrigerant piping (F) extends are positioned on the inner side of both end parts of the ferrite part (98, 99).

IPC 8 full level

**H05B 6/10** (2006.01); **F25B 1/00** (2006.01); **F25B 13/00** (2006.01); **F25B 41/00** (2006.01)

CPC (source: EP)

**F25B 13/00** (2013.01); **H05B 6/108** (2013.01); **F25B 2400/01** (2013.01)

Citation (search report)

See references of WO 2010079570A1

Cited by

FR2988973A1; US10914503B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)

**EP 2381740 A1 20111026**; CN 102227951 A 20111026; JP 5267572 B2 20130821; JP WO2010079570 A1 20120621; WO 2010079570 A1 20100715

DOCDB simple family (application)

**EP 09837460 A 20091225**; CN 200980149096 A 20091225; JP 2009007240 W 20091225; JP 2010545640 A 20091225