

Title (en)  
MULTIPLE AIR CONDITIONER

Title (de)  
MEHRFACH-KLIMAAANLAGE

Title (fr)  
CLIMATISEUR A UNITES MULTIPLES

Publication  
**EP 2416090 A4 20170816 (EN)**

Application  
**EP 10758493 A 20100324**

Priority  
• JP 2010055063 W 20100324  
• JP 2009083370 A 20090330

Abstract (en)  
[origin: EP2416090A1] A liquid head pressure applied to an electronic expansion valve disposed in front (at the inlet) of an indoor heat exchanger is reduced so as to prevent failure in opening and closing (operation failure) of the electronic expansion valve. In a multi-unit air conditioner (1) including a single outdoor unit (2) and a plurality of indoor units (3) disposed below the outdoor unit (2) and connected to the outdoor unit (2) via a coolant pipe (8), a decompressing mechanism (7) including three electromagnetic on-off valves (22, 23, 24) and three capillary tubes (25, 26, 27) having different lengths is provided near an outlet, for cooling operation, of the outdoor unit (2), and a unit constituted of each electromagnetic on-off valve and each capillary tube connected to the electromagnetic on-off valve is arranged in parallel with the coolant pipe (8).

IPC 8 full level  
**F25B 41/06** (2006.01); **F24F 11/00** (2006.01); **F25B 13/00** (2006.01)

CPC (source: EP US)  
**F25B 13/00** (2013.01 - EP US); **F25B 41/37** (2021.01 - EP US); **F25B 41/385** (2021.01 - EP US); **F25B 41/39** (2021.01 - EP US); **F24F 11/84** (2017.12 - EP); **F25B 2313/005** (2013.01 - EP); **F25B 2313/006** (2013.01 - EP); **F25B 2313/0233** (2013.01 - EP); **F25B 2313/02741** (2013.01 - EP); **F25B 2500/01** (2013.01 - EP); **F25B 2500/06** (2013.01 - EP); **F25B 2600/2513** (2013.01 - EP); **F25B 2600/2519** (2013.01 - EP); **F25B 2700/191** (2013.01 - EP)

Citation (search report)  
• [I] JP 2000220891 A 20000808 - SANYO ELECTRIC CO  
• [A] DE 4238531 A1 19940203 - DANFOSS AS [DK]  
• [A] WO 2008093538 A1 20080807 - DAIKIN IND LTD [JP], et al  
• See references of WO 2010113719A1

Citation (examination)  
US 2004216477 A1 20041104 - YAMASAKI HARUHISA [JP], et al

Cited by  
CN107894068A; EP3051219A1; US2016223240A1

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