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- **Park, Moon Soo**
Anyang-Si,
Gyeonggi-Do (KR)
- **Song, Myung Seob**
Gyeonggi-Do (KR)
- **Kim, Woo Hyun**
Seoul (KR)

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(71) Applicant: **SAMSUNG ELECTRONICS CO., LTD.**
Suwon-si, Gyeonggi-Do 442-742 (KR)

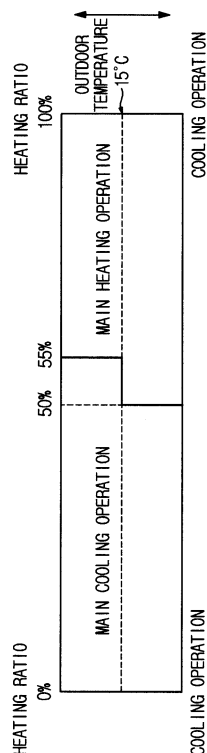
(74) Representative: **Geary, Stuart Lloyd et al**
Venner Shipley LLP
20 Little Britain
London EC1A 7DH (GB)

(72) Inventors:
• **Jung, Gyoo Ha**
Suwon-Si,
Gyeonggi-do (KR)

(54) **Multi-unit air conditioner and method for controlling the same**

(57) Disclosed herein is a simultaneous cooling and heating operation controlling method of a multi air conditioner system comprising a plurality of indoor units connected in parallel to an outdoor unit. The simultaneous cooling and heating operation controlling method comprises differently setting a cooling and heating reference range to decide main operation mode of the multi air conditioner system based on outdoor temperature, measuring the outdoor temperature to select the cooling and heating reference range based on the outdoor temperature, summing capacities of the indoor units where a cooling or heating operation is set to calculate cooling and heating ratio, and identifying part of the cooling and heating reference range corresponding to the cooling and heating ratio to decide the main operation mode of the multi air conditioner system.

Fig 4



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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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			TECHNICAL FIELDS SEARCHED (IPC)
			F25B
<div style="text-align: center;"> <p>The present search report has been drawn up for all claims</p> </div>			
Place of search Munich		Date of completion of the search 11 January 2006	Examiner Valenza, D
<div style="display: flex; justify-content: space-between;"> <div> <p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone</p> <p>Y : particularly relevant if combined with another document of the same category</p> <p>A : technological background</p> <p>O : non-written disclosure</p> <p>P : intermediate document</p> </div> <div> <p>T : theory or principle underlying the invention</p> <p>E : earlier patent document, but published on, or after the filing date</p> <p>D : document cited in the application</p> <p>L : document cited for other reasons</p> <p>& : member of the same patent family, corresponding document</p> </div> </div>			

**CLAIMS INCURRING FEES**

The present European patent application comprised at the time of filing more than ten claims.

- ☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claim(s):
- ☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

- ☐ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
- ☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.
- ☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:
- ☒ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:

1-14



The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-14

Air conditioner and control method therefor comprising an outdoor unit provided with an outdoor temperature sensor, a plurality of indoor units and control means, wherein the control means perform the control of the main cooling and heating operation in function of the outdoor temperature sensor output.

2. claim: 15

Air conditioner comprising an outdoor unit, a plurality of indoor units provided with indoor temperature sensors and control means, wherein the control means perform the control of the main cooling and heating operation in function of the indoor temperature sensors output.

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 05 10 3533

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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11-01-2006

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