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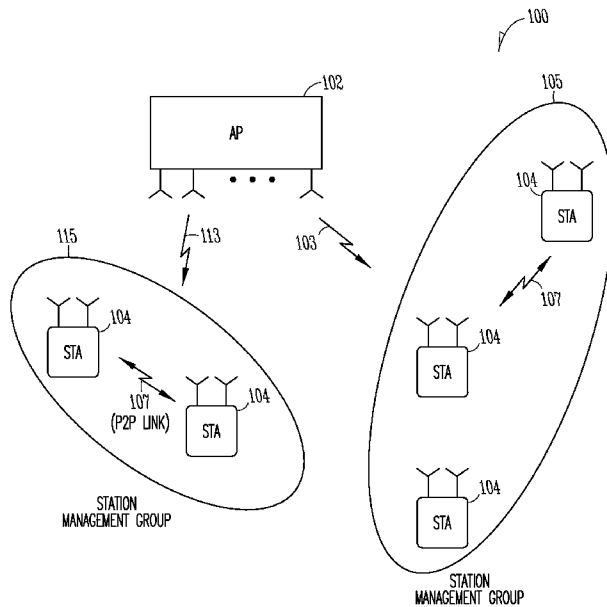
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(54) **Title:** ACCESS POINT CONFIGURED FOR STATION GROUP MANAGEMENT AND METHOD FOR MANAGING STATION-MANAGEMENT GROUPS



BSS

FIG. 1

(57) **Abstract:** Embodiments of an access point configured for station group management and a method for managing station-management groups in a wireless network are generally described herein. In some embodiments, the access point may transmit a group allocation message to selected stations and establish a station-management group to include stations from which response frames are received. The access point may also transmit DL MU-MIMO transmissions to the stations of the station-management group using a MU-MIMO technique. When explicit group deletion is employed, the access point may explicitly delete some stations from the station-management group by transmitting a group deletion message to the stations of the group. When implicit group deletion is employed, the access point may implicitly delete some stations from the station-management group after a predetermined period of time indicated in the group allocation message by refraining from transmitting DL MU-MIMO transmissions or group update messages to the stations of the group.

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A. CLASSIFICATION OF SUBJECT MATTER**H04B 7/04(2006.01)i, H04W 88/08(2009.01)i**

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B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

H04B 7/04; H04W 24/02; H04W 84/10; B60H 1/00; H04B 1/02

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) & Keywords: MIMO(Multiple-Input Multiple-Output), station-management group, access point

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 4463744 B2 (KEIHIN CORP.) 26 February 2010 See abstract; paragraphs [52],[53],[60]-[62]; claim 1 and figures 3-5.	1-20
A	US 2004-0009755 A1 (SHOUSEI YOSHIDA) 15 January 2004 See abstract; paragraphs [30]-[36]; claims 11-13 and figures 11-14.	1-20
A	JP 2009-231861 A (FUJITSU LTD.) 08 October 2009 See abstract; paragraphs [11],[12],[56]-[65]; claims 1-3 and figures 3-5.	1-20

 Further documents are listed in the continuation of Box C. See patent family annex.

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