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Li et al.

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(54) **MULTI-CARRIER COMMUNICATIONS WITH ADAPTIVE CLUSTER CONFIGURATION AND SWITCHING**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

This patent is subject to a terminal disclaimer.

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Related U.S. Application Data

(63) Continuation of application No. 11/592,084, filed on Nov. 2, 2006, now Pat. No. 7,379,742, which is a continuation of application No. 09/837,701, filed on Apr. 17, 2001, now Pat. No. 7,146,172, which is a continuation-in-part of application No. 09/738,086, filed on Dec. 15, 2000, now Pat. No. 6,947,748.

(51) **Int. Cl.**
H04Q 7/20 (2006.01)

(52) **U.S. Cl.** **455/452.1**; 455/447; 455/450; 455/452.2; 455/453; 370/343; 370/347; 375/276

(58) **Field of Classification Search** 455/452.1, 455/447, 450, 452.2, 453; 370/343, 347; 375/276
See application file for complete search history.

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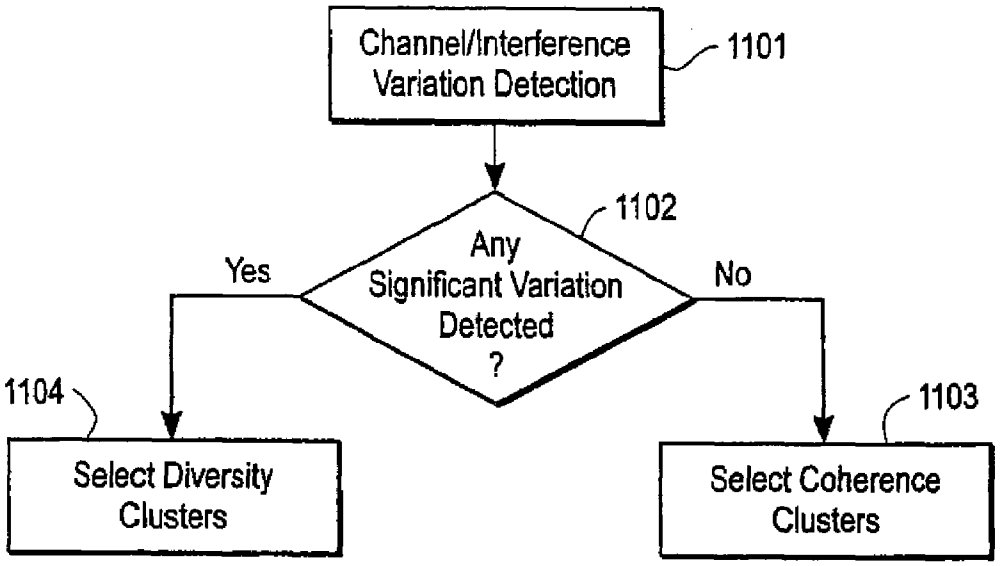
(57) **ABSTRACT**

A method and apparatus for allocating subcarriers in an orthogonal frequency division multiple access (OFDMA) system is described. In one embodiment, the method comprises allocating at least one diversity cluster of subcarriers to a first subscriber and allocating at least one coherence cluster to a second subscriber.

19 Claims, 7 Drawing Sheets



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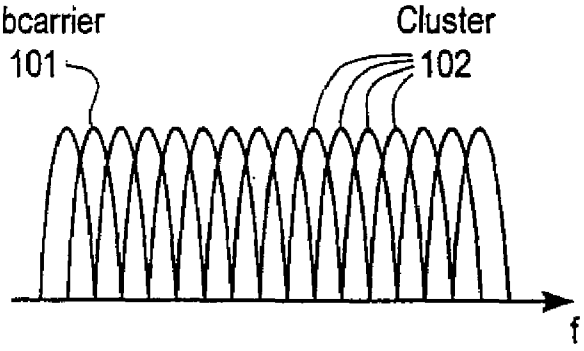
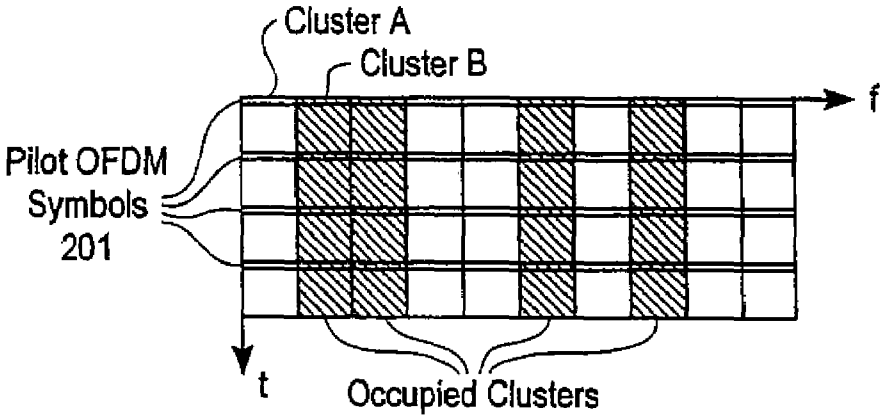
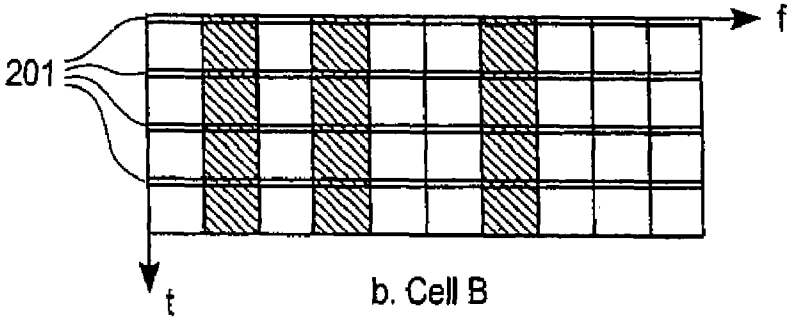


FIG. 1A



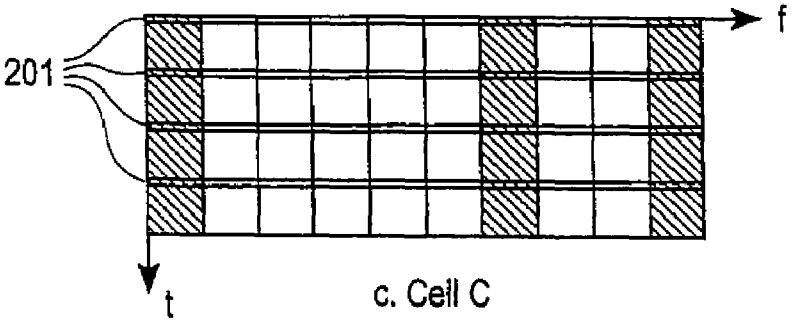
a. Cell A

(A)



b. Cell B

(B)



c. Cell C

(C)

FIG. 2

DOCKET ALARM

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Real-Time Litigation Alerts

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