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

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See application file for complete search history.

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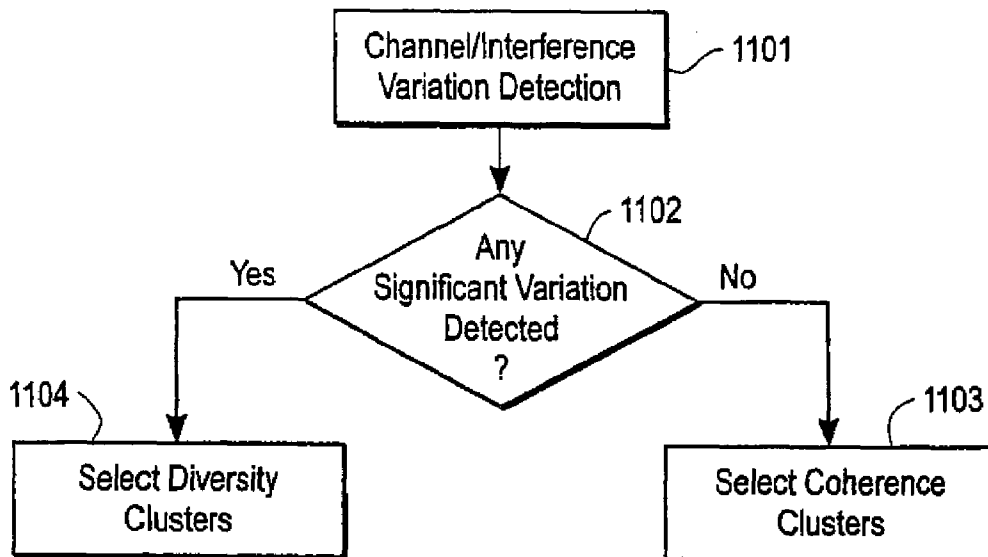
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(57) **ABSTRACT**

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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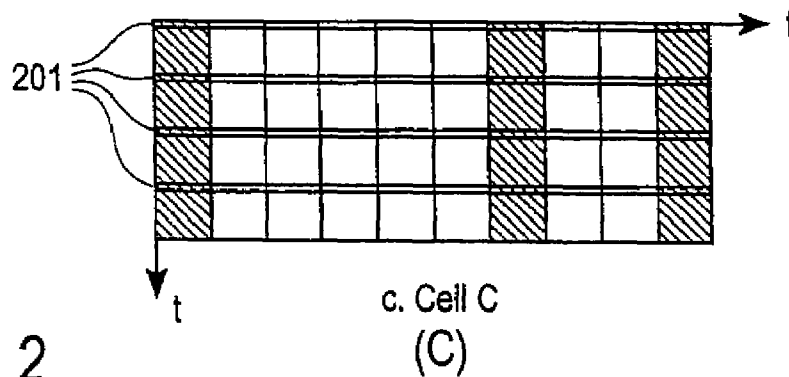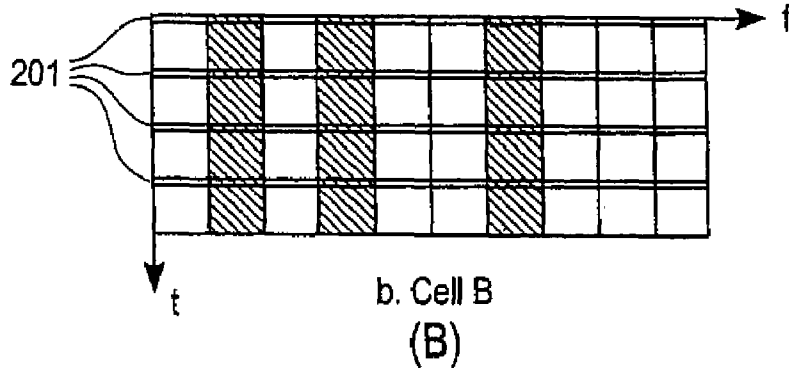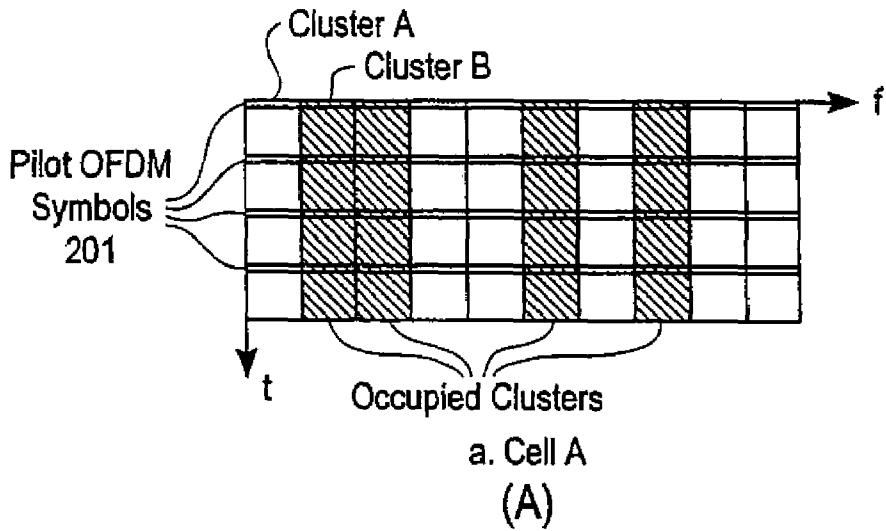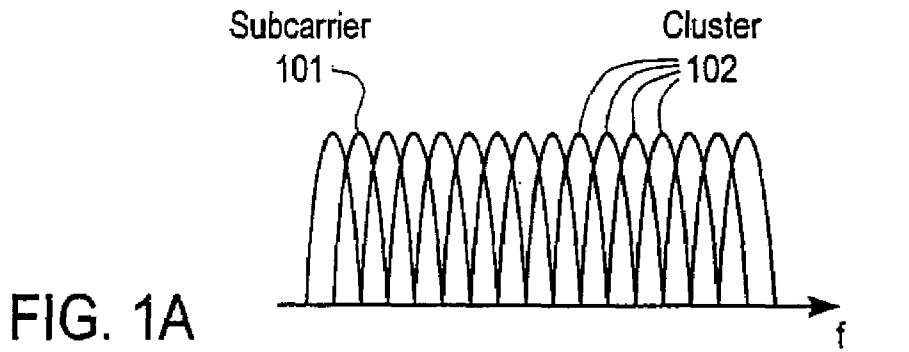
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FIG. 1A

a. Cell A

(A)

b. Cell B

(B)

c. Cell C

(C)

FIG. 2

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