(19)

Europäisches
Patentamt

European
Patent Office

Office européen
des brevets

(11) **EP 2 337 397 A8**

(12) **CORRECTED EUROPEAN PATENT APPLICATION**

(54) **Method and apparatus for handover between ieee 802.16e and 802.16m systems**

(57)   Methods for a mobile station to handover between IEEE 802.16e and 802.16m systems are provided. The mobile station is served by an IEEE 802.16e-only base station or an IEEE 802.16e zone of a 16e/16m-conexistence base station. In a zone-switch based handover procedure, the mobile station first performs an IEEE 802.16e legacy handover procedure such that the mobile station handovers from the serving base station to an IEEE 802.16e zone of a target base station. The mobile station then performs a zone-switch procedure such that the mobile station switches from the IEEE 802.16e zone to an IEEE 802.16m zone of the target base station. In a direct handover procedure, the mobile station performs an IEEE 802.16m handover procedure such that the mobile station handovers from the serving base station to the IEEE 802.16m zone of the target base station directly.
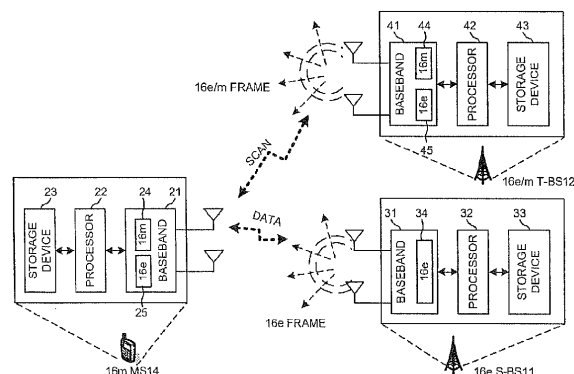
FIG. 2

EP 2 337 397 A8