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Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

[Continued on next page]

(54) Title: MULTI-CARRIER CONNECTION MANAGEMENT USING BANDWIDTH AGGREGATION FOR AIR-GROUND MOBILE COMMUNICATION SYSTEMS

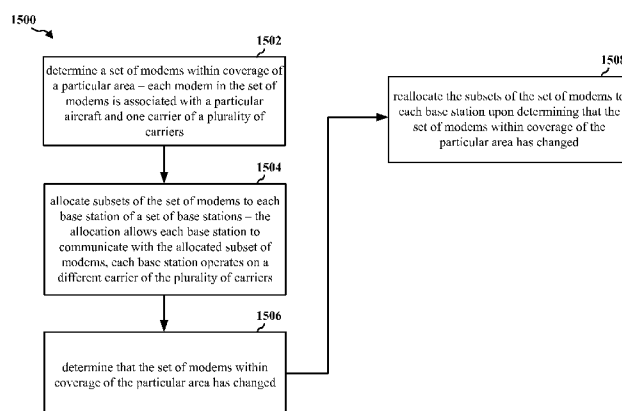


FIG. 15

(57) Abstract: The connection management entity apparatus determines a set of modems within coverage of a particular area. Each modem of the set of modems is associated with a particular aircraft and one carrier of a plurality of carriers. The apparatus allocates subsets of modems to each eNB of a set of eNBs. The allocation allows each eNB to communicate with the allocated subset of modems. Each eNB operates on a different carrier. The apparatus may be a eNB. The eNB determines a set of modems within coverage of the eNB. The set of modems is associated with one carrier of a plurality of carriers. The eNB operates on the one carrier. Each modem in the set of modems is associated with a different aircraft. The eNB sends information indicating the set of modems and receives an allocation of a second set of modems in response to the sent information.





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