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(54) Title: SYSTEMS AND METHODS FOR MAPPING VIRTUAL RADIO INSTANCES INTO PHYSICAL VOLUMES OF COHERENCE IN DISTRIBUTED ANTENNA SYSTEMS

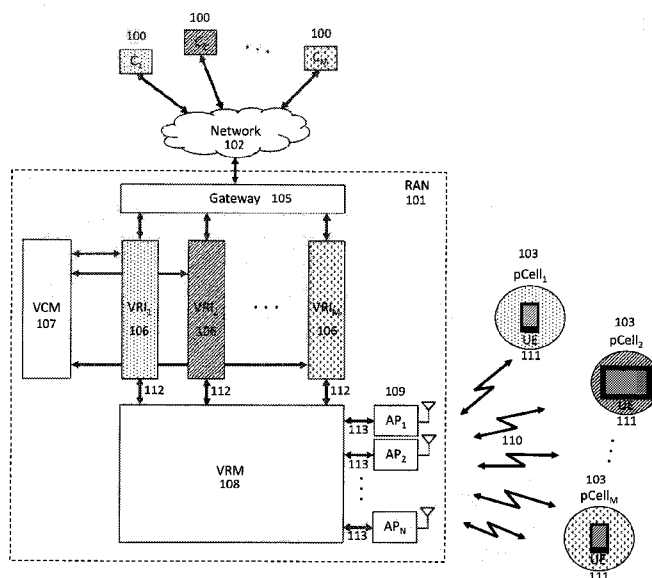


Fig. 1

(57) Abstract: Systems and methods are described for mapping Virtual Radio Instances (VRIs) into physical volumes of coherence in a Multiple Antenna System (MAS) with Multi-User (MU) transmissions ("MU-MAS"). These mapping methods enable communications through simultaneous non-interfering data streams in the same frequency band between the MU-MAS and multiple users, within their own volume of coherence. As the users move, their VRIs follow their respective volumes of coherence via teleportation to adjacent MU-MAS networks, thereby eliminating the need for handoffs as in conventional cellular systems and unnecessary control data overhead.