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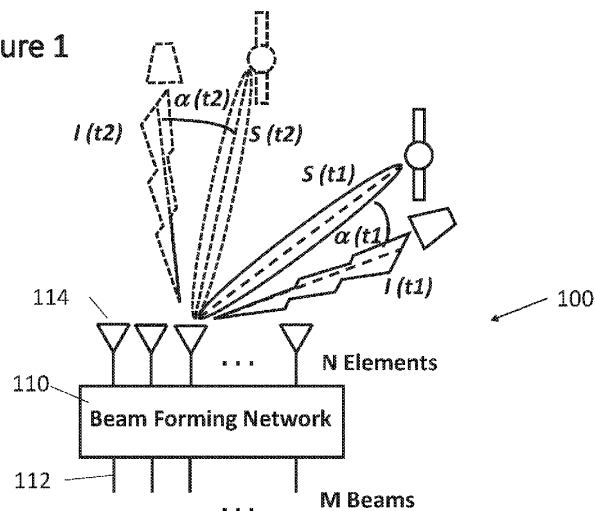
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(54) Title: DYNAMIC INTERFERENCE REDUCTION FOR ANTENNA BEAM TRACKING SYSTEMS

Figure 1



(57) Abstract: An antenna beam tracking system has dynamic interference reduction. The system includes antennas that can form multiple beams, each beam of which can continually track or point its beams independently in various angular directions. A first beam continually tracks and receives (downlink) signals from a desired source or node such as a satellite or terrestrial node which generally has an apparent motion relative to the antenna. A second beam continually tracks and receives potentially harmful interference signals that may arise from different directions. The signals of the second beam are dynamically coupled to the signals in the first beam in such a manner as to effect cancellation or substantial reduction of the interference.

[Continued on next page]

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