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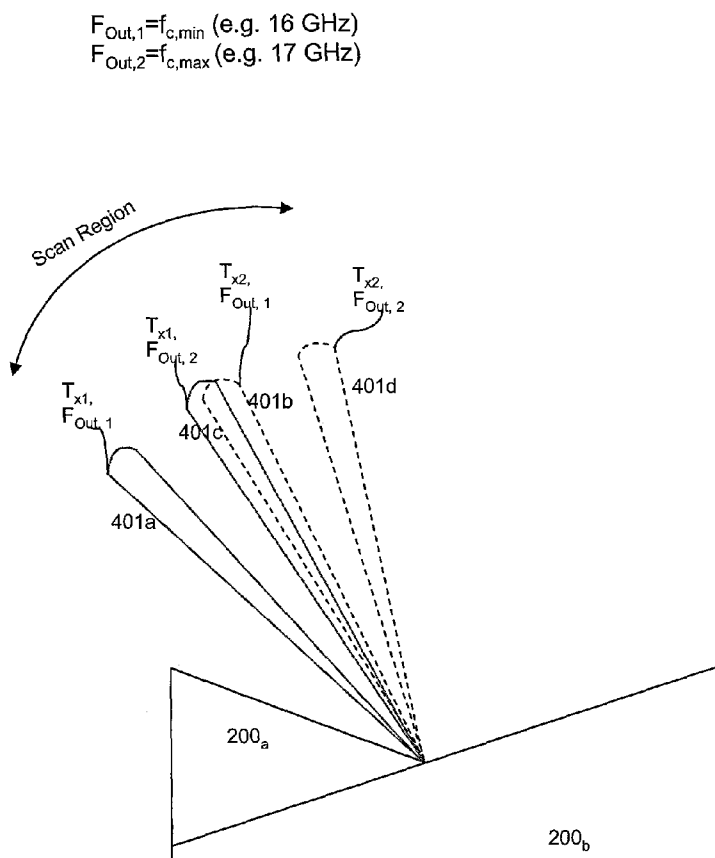
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(54) Title: FREQUENCY SCANNING ANTENNA



(57) Abstract: Embodiments of the invention are concerned with frequency scanning antennas for transceiving radio frequency energy for use in detecting and monitoring ground-based targets. In one arrangement the frequency scanning antenna is embodied as a structure that is capable of steering a radio frequency beam to a plurality of different angles about the antenna structure: the antenna structure comprises at least two array antennas and a controller for controlling input of energy to the two array antennas, and the array antennas are disposed within the antenna structure such that the antenna structure is capable of steering a beam to a first angle using one of said two array antennas and of steering a beam to a second angle, different to said first angle, using the other of said two array antennas. Thus in embodiments of the invention two or more array antennas are arranged to form an antenna structure, and the feed to a respective antenna array of the antenna structure is coordinated so that individual scan areas can be combined to generate an increased overall scan region.

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