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(54) Title: ARRAY FED RF LENS ANTENNA

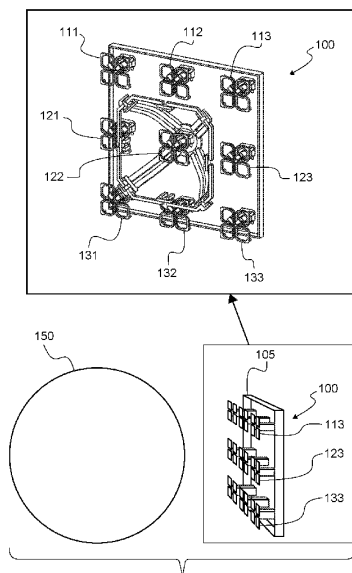


Figure 1

(57) Abstract: A communication system includes an array of RF elements that transit and/or receive signals through a lens, and a power divider is configured to provide unequal amplitude and/or phase to at least some of the RF elements. In transmit mode, the shape and direction of the resulting beam is controlled in part by the shape of the array, the relative power distributed to the different RF elements, the operating frequency, the shape of the lens, the position of the lens with respect to the array, and the distance of the lens from the array.

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