

**Exhibit A-14 - Invalidity of U.S. Patent No. 10,715,235 in view of U.S. Patent No. 7,155,231**

Based upon XR Communications' Complaint, Infringement Contentions, and apparent claim constructions and accused products, as best as they can be deciphered, the reference charted below anticipates or at least renders obvious the asserted claims of the '235 Patent. These invalidity contentions are not an admission that the accused products are covered by or infringe the asserted claims of the '235 Patent if the asserted claims are properly construed and applied. These invalidity contentions are not an admission that concedes or acquiesces to the claim construction implied or suggested by XR Communications' Complaint or Infringement Contentions. These invalidity contentions do not assert any claim construction positions through these charts, including whether the preamble is a limitation. The reference cited below are not exhaustive but are exemplary in nature.

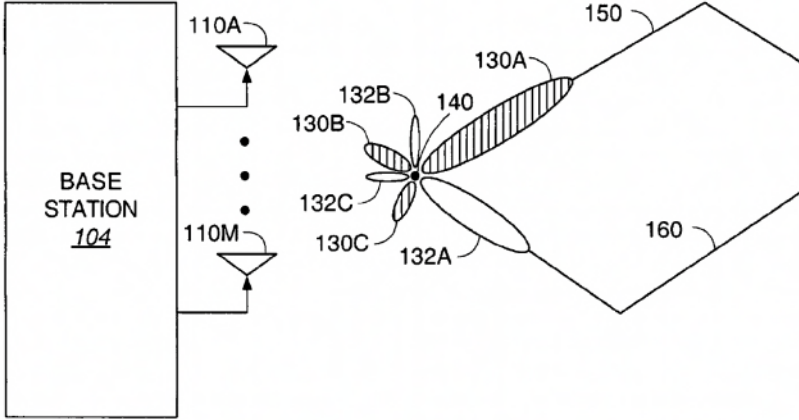
U.S. Patent No. 7,155,231 to Joseph P. Burke ("Burke"), filed Oct. 15, 2002, with Provisional Application No. 60/320,000 and published Aug. 14, 2003, qualifies as prior art under at least pre-AIA 35 U.S.C. §§ 102(a), (b) and (e). As depicted in the chart, the asserted claims of the U.S. Patent No. 10,715,235 (the "'235 Patent") are invalid as anticipated by Burke.

To the extent that Burke is found not to anticipate one or more of the asserted claims of the '235 Patent, these claims are invalid in view of Burke alone, in view of the background knowledge and ordinary creativity of a person having ordinary skill in the art at the time the '235 Patent was invented, or in combination with other prior art references disclosed in Defendants' Invalidity Contentions and accompanying charts, including without limitation as set forth below.

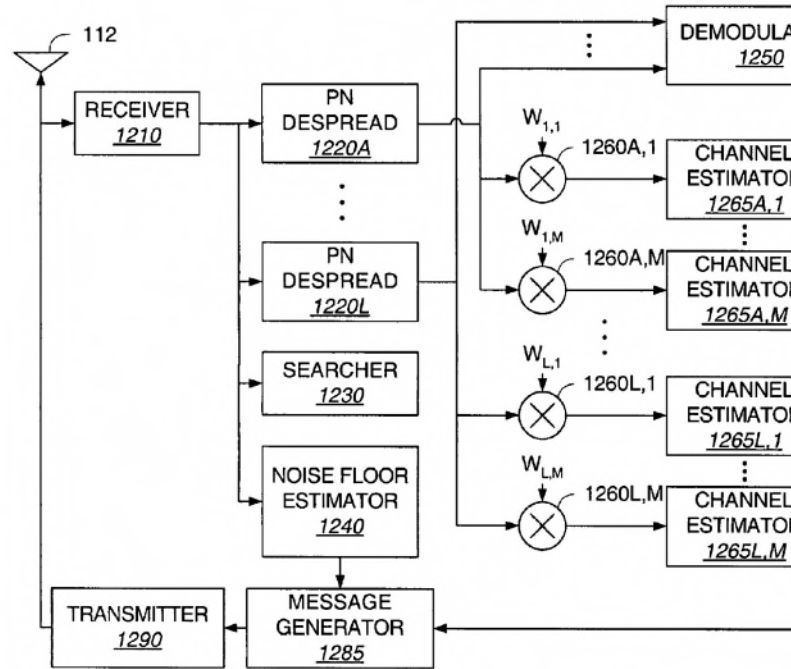
**Claim 1**

No.	U.S. Patent No. 10,715,235	U.S. Patent No. 7,155,231 ("Burke")
1pre	A receiver for use in a wireless communications system, the receiver comprising:	To the extent the preamble is limiting, Burke expressly or inherently anticipates the claimed element.  <i>See, e.g.,</i>  "Techniques for pre-correction of transmit signals are disclosed. In one aspect, an antenna array configurable to generate multiple transmit beams is used. The parameters for configuring the antenna array are computed in response to channel state information floor estimate made at the receiver. Information is transmitted in multiple transmit beams, delayed as necessary, such that the multipaths are in phase at the receiver. In another aspect, pre-RAKE pre-correction is used to pre-correct the transmit signals.

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		<p>Wiener weights. In yet another aspect, space-time diversity is de values for FIR filters used in transmission on the transmit antenn space only pre-correction is deployed. Various other aspects are have the benefit of reducing the interference experienced at a rec capacity, increased data throughput, and other system benefits.”</p> <p>“For clarity, the examples used in describing this invention may originator of signals and mobile stations as receivers and acquire on the forward link. Those skilled in the art will understand that stations may be equipped to transmit data as described herein an invention apply in those situations as well.” Burke, 3:54-61.</p> <p>“FIG. 12 depicts a present embodiment of a mobile station 106, with base station 104 and any of the signal conditioners 320, des received at antenna 112 (which may be a single antenna, or an a deploying diversity techniques known in the art). The received s receiver 1210, using techniques appropriate for one or more com compatible with mobile station 106, such as those described abo include amplification, filtering, down conversion, analog to digi techniques known in the art.” Burke, 25:56-67.</p> <p>“In an alternate embodiment, base station 104 may be deployed processor 310. The pre-correction parameters may be generated mobile station 106, and transmitted for application to signal con receiver 370, and message decoder 380, as described above. Thi shown.” Burke, 5:65-6:4.</p>
1a	An antenna, wherein the antenna comprises a first antenna element and a second antenna element;	<p>Burke expressly or inherently discloses this claim element.</p> <p><i>See, e.g.,</i></p>

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		<p data-bbox="805 779 1624 852">Burke’s mobile station 106 receives a first signal transmission through signal path 150 and a second signal transmission through signal path 160 from the base station 104.</p>  <p data-bbox="1312 1472 1409 1503"><b>FIG. 2</b></p> <p data-bbox="805 1545 984 1577">Burke, Fig. 2.</p> <p data-bbox="805 1608 1624 1713">An array of antennas 110A-110M can “be used to transmit signals simultaneously” and that each antenna in the array can be used to transmit a signal through an individual path. Burke, 5:54-55, 8:42-51.</p> <p data-bbox="805 1755 1624 1818">Antenna 112 at the mobile station “may be a single antenna, or a multiple antenna array.” Burke, 25:58-61.</p>

No.	U.S. Patent No. 10,715,235	U.S. Patent No. 7,155,231 (“Burke”)
		<p>“As described above, during optimum performance, pre correction weights and delays that cause the signals received along the various multipaths to be simultaneously and in-phase.” Burke, 7:66-8:2.</p> <p>“[D]uring optimum performance, precorrection processor 310 processes the signals that cause the signals received along the various M multipaths to be in-phase.” Burke, 26:16-22; <i>see also id.</i> 5:54-55; <i>see also</i> 7:18-22.</p> <p>“Fig. 12 depicts a present embodiment of a mobile station 106, communicating with base station 104 and any of the signal conditioners 320, despread signals received at antenna 112 (which may be a single antenna or an array of antennas employing diversity techniques known in the art). The received signals are processed by receiver 1210, using techniques appropriate for one or more communication systems compatible with mobile station 106, such as those described above. These techniques include amplification, filtering, down conversion, and other techniques.” Burke, 25:56-27:22; <i>see also id.</i> 4:6-18.</p>



**FIG. 12**

Burke, Fig. 12.

“Between the lobes of an antenna beam pattern there exists a null. When signals are transmitted through antennas 104 destructively interfere with each other, the antenna pattern 130, nulls exist between lobes 130A and 130B, between 130B and 130C, and between 130C and 130A. In an embodiment, antenna 132 is formed such that its primary lobe 130A is placed within or nearly within the nulls between lobes 132A and 132B of antenna beam pattern 132. Similarly, antenna 134 is formed such that its primary lobe 132A is placed within or nearly within the nulls between lobes 134A and 134B of antenna beam pattern 134.

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