REMARKS

In response to the pending Office Action of May 6, 2021, the present application has been amended and is believed to be in condition for allowance.

I. SUMMARY OF THE CLAIMS

Claims 1-21 are pending, of which claims 1-20 are rejected and independent claim 21 is allowed. By way of this Amendment, allowed method claim 21 is amended for clarity and independent system claim 1 is amended to recite the features of allowed independent method claim 21. Dependent claims 2-20 are also amended for clarity and to provide antecedent basis. No new matter has been added.

II. INDEPENDENT METHOD CLAIM 21

Independent claim 21 is allowed. By way of this Amendment, claim 21 is amended to clarify relationship between the *position correction* device, the determined *correction*, and the applied *phase correction*. Specifically, claim 21 is amended to recite detecting structural displacement from a fully deployed configuration, applying a mechanical force to move the antenna elements toward the fully deployed configuration, and applying a phase correction to correct for residual structural displacement. Even if the force does not actually move the antenna elements toward the fully deployed configuration, such as due to counterforces in space, the force is one that moves the antenna elements toward the fully deployed configuration. Claim 21 is also amended to no longer recite the relative term "large."

III. PRIOR ART REJECTIONS OF CLAIMS 1-20

Claims 1-20 are rejected under § 102 as allegedly anticipated by *Kempkes*[1] or under § 103 as allegedly unpatentable over *Kempkes* in view of *Howard*,[2] *Robinson*,[3] *Hu*,[4] and/or *Lach*.[5] By way of this Amendment, independent system claim 1 is amended to recite the features of allowed method claim 21. Specifically, claim 1 recites:

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[1] U.S. Pat. No. 5,623,270
[2] U.S. Pat. Pub. No. 2018/0359023
[3] U.S. Pat. No. 8,930,047
[4] U.S. Pat. No. 6,879,875
[5] U.S. Pat. No. 5,440,320

- a plurality of discrete antenna elements connected together by a plurality of connectors to form a structural array having a fully deployed configuration in which the plurality of discrete antenna elements are coplanar with one another;
- a processing device that generates a beam having a beam phase;
- one or more sensors that detect structural displacement of the plurality of discrete antenna elements from the fully deployed configuration;
- a position correction device that applies a mechanical force to move the plurality of discrete antenna elements toward the fully deployed configuration;
- the one or more sensors detecting residual structural displacement of the plurality of discrete antenna elements from the fully deployed configuration; and
- the processing device determining a phase correction to correct for the residual structural displacement and applying the phase correction to the beam.

Even in combination, the cited references do not teach or suggest those features. Dependent claims 2-20 depend from claim 1 and are therefore allowable at least by virtue of their dependency. Accordingly, the Applicant respectfully requests reconsideration and withdrawal of the prior art rejections.

IV. INDEFINITENESS REJECTIONS OF CLAIMS 8-9

Claims 8-9 stand rejected under § 112 as allegedly indefinite. Claim 7 is amended to depend from claim 3, providing antecedent basis for "the acceleration sensor" recited in claim 8. Claim 8 is also amended to no longer recite that the acceleration sensor is "as close as possible" to the position sensor. Claim 9 is amended to no longer recite "and/or". Accordingly, the Applicant respectfully requests reconsideration and withdrawal of the indefiniteness rejections.

V. CONCLUSION

In view of the above amendment, the Applicant believes the pending application is in condition for allowance.

Please charge any shortage or credit any overpayment of fees to BLANK ROME LLP, Deposit Account No. 23-2185, under Order No. 150825.00175. In the event that a petition for an extension of time is required to be submitted herewith and in the event that a separate petition does not accompany this Amendment or is insufficient to render this Amendment timely, the

Applicant hereby petitions under 37 C.F.R. §1.136(a) for an extension of time for as many months as required to render this submission timely. Any fee due is authorized above.

Dated: Aug. 6, 2021

Respectfully submitted,

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