

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MOMENTUM DYNAMICS CORPORATION,
Petitioner

v.

WITRICITY CORPORATION,
Patent Owner

Case IPR2021-01116
Patent 9,767,955

**PATENT OWNER'S RESPONSE
TO PETITION FOR INTER PARTES REVIEW**

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I. INTRODUCTION

WiTricity Corporation and Auckland Uniservices Ltd. (collectively “Patent Owner”)¹ submit this Preliminary Response to the Petition for *inter partes* review (“IPR”) of U.S. Patent No. 9,767,955 (the “’955 Patent”) filed by Momentum Dynamics Corporation (“Petitioner”). As explained below, Petitioner has failed to carry its burden to show by a preponderance of the evidence that the challenged claims are unpatentable.

Anticipation Ground 1 based on Hui-910 (EX1005) fails due to its reliance on an improper claim construction. As discussed in more detail below, Petitioner’s proposed construction interprets the independent claims to exclude the “a shield member”—one of two independently recited claim elements. Petitioner argues for a claim construction that is at odds with the detailed description of the ’955 Patent itself and misapplies the doctrine of claim differentiation. Ground 1 applies this construction, and thus fails to address this improperly excluded claim element.

In addition, obviousness Ground 2 based on Hui-910 and Beart (EX1006) fails to show that a POSITA would have been motivated to combine the teachings

¹ As noted in the Mandatory Notices, WiTricity Corporation is an exclusive licensee of the ’955 patent, which is owned by Auckland UniServices Limited. *See* Paper 4, 1.

of Beart and Hui-910 in the manner proposed. Petitioner's analysis ignores fundamental design differences between the systems of Hui-910 and Beart, and, in so doing, fails to show that Beart's sidewall (which Petitioner alleges forms part of the claimed "shield member") would provide any added benefit to Hui-910, much less any benefit that would have motivated a POSITA to perform the combination. Petitioner also provides no evidence – aside from the conclusory assertions of Dr. Allen – that sidewall shielding would provide any additional benefit to a passive inductive power receiver in a mobile phone that already includes a backplate shield.

As to Ground 3—obviousness based on Nakao (EX1007) in view of Beart—Petitioner fails to show that a POSITA would have been motivated to combine the teachings of Beart and Nakao in the manner proposed. Specifically, the Petition ignores the detrimental effects that the proposed modifications to Nakao would have on Nakao's principle of operation. As shown below, these effects would frustrate the intended purpose of Nakao's invention, which would lead a POSITA not to perform the proposed combination. Here again, provides no evidence – aside from the conclusory assertions of Dr. Allen – that sidewall shielding would provide any additional benefit to a passive inductive power receiver.

In light of these deficiencies, the Petition fails to show that any challenged claim is unpatentable. Thus, the Board should find challenged claims patentable.

II. SUMMARY OF THE '955 PATENT

The '955 Patent is directed to “Inductive Power Transfer (IPT) pad[s]” for charging electric vehicles. EX1001, 1:18-20. Two IPT pads are used in combination to wirelessly transfer power from a transmitter pad to a receiver pad. *Id.*, Abstract, 4:1-5, cl. 13.

Each IPT pad includes a coil, magnetic members (e.g., ferrite bars), a shield member “arranged around both [the] coil” and the magnetic members, and a backplate. *Id.*, 2:40-43, 3:10-12, FIG. 4. The '955 Patent explains that together “the backplate and the shield member serve to direct flux upwards from the backplate with less splay of flux in and parallel to the plane of the backplate.” *Id.*, 3:53-56, 9:15-21. Further, the shield member and backplate together “improve[] the inductive coupling” between transmitter and receiver pads, and also “reduce[] the chance that any undesired objects will be subjected to the induced fields during use.” *Id.*, 3:56-59, 9:15-21.

The '955 Patent describes the “shield member” as “formed from a strip of material with the ends thereof joined to form a ring.” *Id.*, 3:32-33. Additionally, the patent states that a cover plate and “the backplate provide front and rear walls of a housing for the IPT pad, with side walls provided by the shield member.” *Id.*, 3:46-50.

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