

PRESS RELEASE

September 29, 2023

BEL ANNOUNCES PATENT AWARD FOR “SEMI-DRY ELECTRODE FOR A NEURAL SENSOR NET”

BEL is pleased to announce a new patent for a semi-dry electrode technology made for improved performance in a neural sensor net.

This innovative design is part of the BEL commitment to advanced research and development in neuroscience equipment.

From the patent: “Semi-dry electrodes bridge the gap between typical wet and dry electrodes, retaining the advantages of both while addressing most of their respective drawbacks. Typically, the volume of electrolyte in a semi-dry electrode is approximately a few tens of microliters, which is substantially less than that of conductive gels (1-2 ml) used for wet electrodes. With such small amounts of electrolyte, semi-dry electrodes not only avoid dirtying the hair and prevent short circuits, but can also locally hydrate the scalp, thereby reducing the electrode/scalp impedance and effectively coupling the electrode to the scalp.”

BEL continues to improve the quality and length of EEG recordings available for researchers while maintaining the highest levels of comfort for subjects – especially in children, infants and special populations.



US011724099B1

(12) **United States Patent**
Tucker et al.

(10) **Patent No.:** **US 11,724,099 B1**
(45) **Date of Patent:** **Aug. 15, 2023**

(54) **SEMI-DRY ELECTRODE FOR A NEURAL SENSOR NET**

FOREIGN PATENT DOCUMENTS

CN 106419913 A * 2/2017

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OTHER PUBLICATIONS

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Guang Li-Li et al., “Review of semi-dry electrodes for EEG recording,” *Journal of Neural Engineering* 17, Oct. 21, 2020, pp. 1-26.