US 20240224429A1

(19) **United States**

(12) **Patent Application Publication** (10) **Pub. No.: US 2024/0224429 A1**

Ramsamy et al. (43) **Pub. Date: Jul. 4, 2024**

(54) **METHOD FOR MANUFACTURING A SENSOR COMPRISING AT LEAST TWO SEPARATE ELECTRODES, AND SENSOR**

(71) Applicant: **Linxens Holding**, Mantes-la-Jolie (FR)

(72) Inventors: **Catheline Ramsamy**, Buchelay (FR); **Nicolas DE GUILLEBON**, Buchelay (FR); **Simon VASSAL**, Buchelay (FR)

(21) Appl. No.: **18/555,031**

(22) PCT Filed: **Apr. 13, 2022**

(86) PCT No.: **PCT/EP2022/059938**

§ 371 (c)(1),
(2) Date: **Oct. 12, 2023**

(30) **Foreign Application Priority Data**

Apr. 14, 2021 (FR) FR2103854

Publication Classification

(51) **Int. Cl.**

H05K 3/10	(2006.01)
C25D 5/10	(2006.01)
C25D 7/00	(2006.01)
H05K 1/02	(2006.01)

(52) **U.S. Cl.**

CPC ***H05K 3/107*** (2013.01); ***C25D 5/10*** (2013.01); ***C25D 7/00*** (2013.01); ***H05K 1/028*** (2013.01)

(57) **ABSTRACT**

A process for manufacturing a sensor including at least two electrodes, including providing a flexible dielectric substrate having a layer of electrically conductive material on at least one of its sides. The electrodes, conductive connecting tracks and a common current supply track are etched in the layer of electrically conductive material. The process further includes electrodepositing one or more layers on the two electrodes and a step of selectively depositing, electrochemically, on at least one electrode, at least one layer of a material different from the one or more materials already deposited on another electrode.