Abstract: Minimally invasive deployable epicardial array devices are provided. The devices include deployable platform comprising two or more effectors, such as sensors and actuators, where the devices are configured to be deployed at an epicardial location via a minimally invasive, e.g., sub-xiphoid approach. In embodiments of the present invention, at least one area of the electrode patch is an electrical control area that comprises a series of effectors, e.g., sensors and/or electrodes. Other embodiments provide localized physical constraint and dynamic mechanical stimulation of the heart to effectuate physical and biological responses. Still other embodiments provide both of these functions. Also provided are methods of using the devices, as well as systems and kits that include the devices.
Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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INTERNATIONAL APPLICATION No
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A CLASSIFICATION OF SUBJECT MATTER
IPC(8) - A61N 1/05 (2006 01)
USPC - 607/129

According to International Patent Classification (IPC) or to both national classification and IPC

B FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC(8) - A61N 1/05 (2006 01)
USPC - 607/2, 4-20, 28, 115-119 and 122-130

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic database consulted during the international search (name of database and, where practical, search terms used)
USPTO EAST System (US, USPG-PUB, EPO, DERWENT), MicroPatent, IP com, DialogPro

C DOCUMENTS CONSIDERED TO BE RELEVANT

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<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
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