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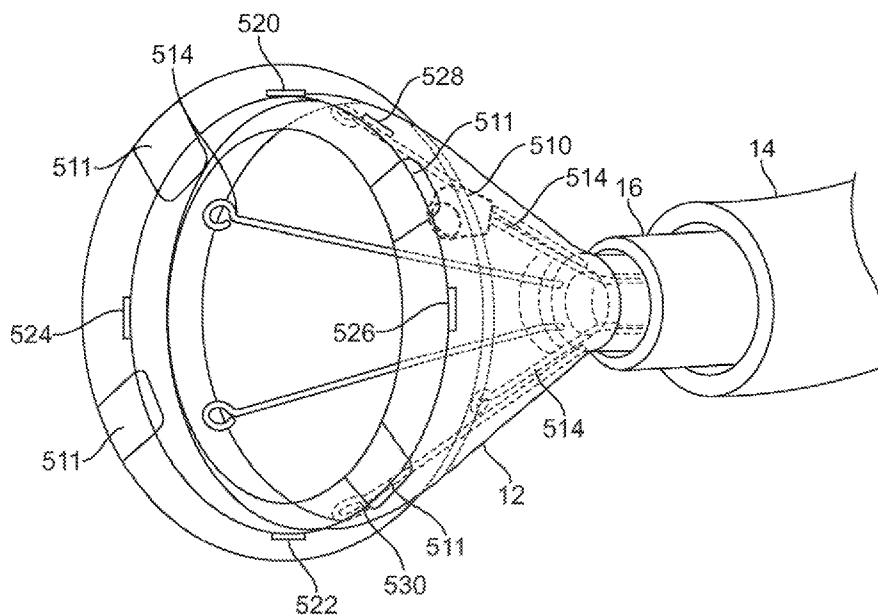
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(54) Title: ELECTROPHYSIOLOGY MAPPING AND VISUALIZATION SYSTEM



(57) **Abstract:** Electrophysiology mapping and visualization systems are described herein where such devices may be used to visualize tissue regions as well as map the electrophysiological activity of the tissue. Such a system may include a deployment catheter and an attached hood deployable into an expanded configuration. In use, the imaging hood is placed against or adjacent to a region of tissue to be imaged in a body lumen that is normally filled with an opaque bodily fluid such as blood. A translucent or transparent fluid, such as saline, can be pumped into the imaging hood until the fluid displaces any blood, thereby leaving a clear region of tissue to be imaged via an imaging element in the deployment catheter. A position of the catheter and/or hood may be tracked and the hood may also be used to detect the electrophysiological activity of the visualized tissue for mapping.

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USPC - 600/478

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B. FIELDS SEARCHED

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Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

USPTO EAST System (US, USPG-PUB, EPO, DERWENT), PatBase

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2006/0184048 A1 (SAADAT) 17 August 2006 (17.08.2006) entire document	1-3, 7-15, 21-25, 27-41
Y		4-6, 16-20, 26, 42
Y	US 2002/0065455 A1 (BEN-HAIM et al) 30 May 2002 (30.05.2002) entire document	4-6, 16-20, 26, 42

Further documents are listed in the continuation of Box C.

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