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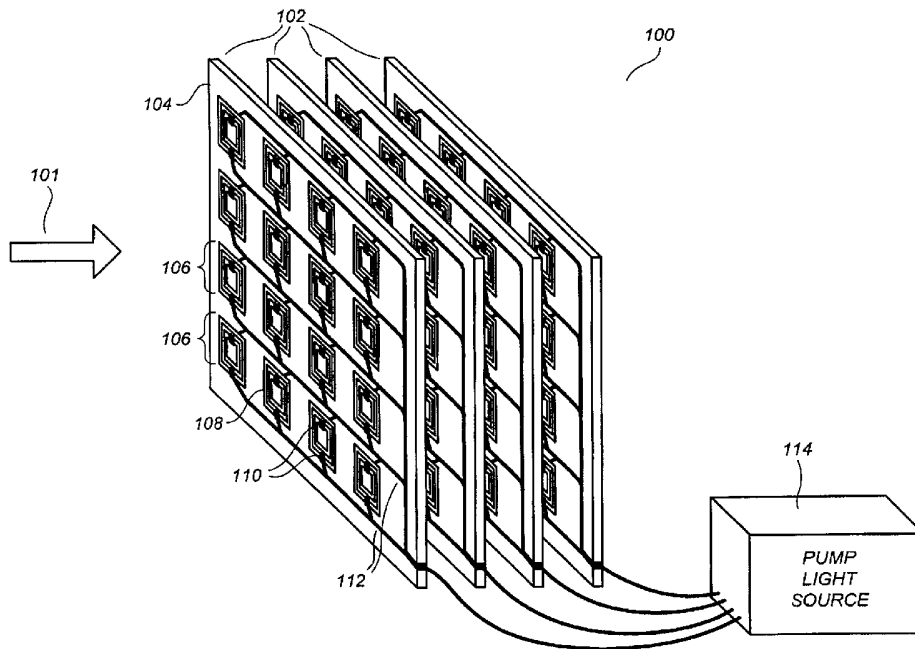
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(54) Title: COMPOSITE MATERIAL WITH POWERED RESONANT CELLS



(57) Abstract: A composite material (100) and related methods are described, the composite material (100) being configured to exhibit a negative effective permittivity and/or negative effective permeability for incident radiation (101) at an operating wavelength, the composite material comprising an arrangement of electromagnetically reactive cells (106) of small dimension relative to the operating wavelength. Each cell (106) includes an externally powered gain element (110) for enhancing a resonant response of that cell to the incident radiation (101) at the operating wavelength.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
H01Q15/00 H01Q3/44

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

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

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	REYNET O ET AL: "Voltage controlled metamaterial" APPLIED PHYSICS LETTERS, AIP, AMERICAN INSTITUTE OF PHYSICS, MELVILLE, NY, US, vol. 84, no. 7, 16 February 2004 (2004-02-16), pages 1198-1200, XP012062131 ISSN: 0003-6951 abstract; figure 1 page 1198 ----- -/--	1,4,5,8, 10

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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A	<p>EP 1 286 418 A (LUCENT TECHNOLOGIES INC) 26 February 2003 (2003-02-26) paragraphs '0012! - '0026!</p>	1-10
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INTERNATIONAL SEARCH REPORT

Information on patent family members

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