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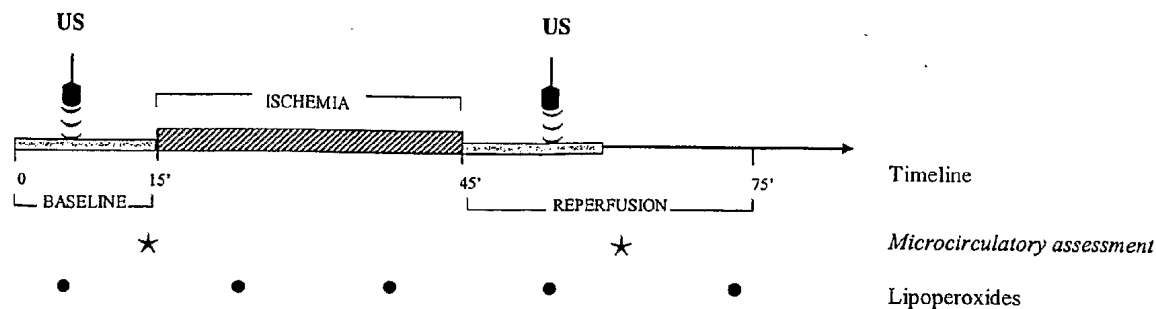
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(54) Title: **ULTRASOUND-ASSISTED ISCHEMIC REPERFUSION**



(57) **Abstract:** A method for stimulating perfusion and minimizing postischemic reperfusion injury. A patient is selected having compromised perfusion in a tissue or in the microcirculation of an organ. An ultrasound transducer is applied to a location near the tissue. The transducer is activated to initiate exposure of the tissue to ultrasound at a frequency of 100 KHz to 2.5 MHz for 0.5 to 15 minutes duration, wherein local vasodilatation is stimulated. In certain cases, the methods further include a step of confirming that local vasodilatation is stimulated by measuring enhancement in perfusion. Ultrasound devices are also described for carrying out the methods. The devices and methods can be used to enhance myocardial perfusion, cerebral perfusion, and perfusion of transplanted tissues.

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INTERNATIONAL SEARCH REPORT

International application No.

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A. CLASSIFICATION OF SUBJECT MATTER

IPC: A61N 7/00(2006.01)

USPC: 601/2

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)

U.S. : 601/2; 600/439

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 practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6,733,450 B1 (ALEXANDROV et al) 27 July 2000 (27.07.2000), column 3, lines 45-65	1-51
Y	US 2004/0153009 A1 (HORZEWSKI et al) 5 February 2003 (05.02.2003), [0004]-[0005], [0024]-[0028]	1-51
Y	US 7,165,451 B1 (BROOKS et al) 10 September 1999 (10.09.1999), column 18, lines 59-67	40-44



Further documents are listed in the continuation of Box C.



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