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A61B 5/022 (2006.01)  A61B 5/02 (2006.01)

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(54) Title: METHODS AND DEVICES FOR REMOTE ISCHEMIC PRECONDITIONING AND NEAR-CONTINUOUS BLOOD PRESSURE MONITORING

(55) Abstract: Single- or dual-bladder devices for remote ischemic preconditioning and blood pressure monitoring are disclosed along with various oscillometry-based and other methods for detecting systolic and diastolic blood pressure while the ischemic preconditioning treatment is in progress. The devices and methods of the invention provide for delivery of ischemic preconditioning at the lowest effective cuff pressure while closely monitoring patient's hemodynamics. Advantageously, the device of the invention allows both ischemic preconditioning and blood pressure monitoring to be done on the same limb. Disposable battery-powered version of the device of the present invention is especially useful for emergency use with patients suffering from acute myocardial infarction, acute stroke, or acute trauma. Additional device configurations are described for use in a percutaneous intervention and vascular sealing settings.
**A. CLASSIFICATION OF SUBJECT MATTER**

A61B 5/022(2006.01), A61B 5/02(2006.01)

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)
A61B 5/022, A61B 5/025

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
Korean utility models and applications for utility models
Japanese utility models and applications for utility models

Electronic database consulted during the international search (name of database and, where practical, search terms used)
eKOMPASS(KIPO internal) & Keywords cuff inflation, limb, remote

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

<table>
<thead>
<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No</th>
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<tr>
<td>A</td>
<td>US 5406953 A (BUI ; HOANH) 18 April 1995 See abstract and figures 1-5b.</td>
<td>1-26</td>
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<td>A</td>
<td>US 5054495 A (UEMURA ; MASAHIRO et al.) 08 October 1991 See abstract and figures 1-4.</td>
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</table>

Further documents are listed in the continuation of Box C

See patent family annex

"A" document defining the general state of the art which is not considered to be of particular relevance
"E" earlier application or patent but published on or after the international filing date
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)
"O" document referring to an oral disclosure, use, exhibition or other means
"P" document published prior to the international filing date but later than the priority date claimed
"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"X" document of particular relevance, the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"Y" document of particular relevance, the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"&" document member of the same patent family

Date of the actual completion of the international search 05 JANUARY 2011 (05 01 2011)

Date of mailing of the international search report 05 JANUARY 2011 (05.01.2011)

Name and mailing address of the ISA/KR

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<th>Patent document cited in search report</th>
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