

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
6 June 2002 (06.06.2002)

PCT

(10) International Publication Number
WO 02/043789 A3

(51) International Patent Classification⁷: A61B 5/00

(21) International Application Number: PCT/US01/44513

(22) International Filing Date:
28 November 2001 (28.11.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/253,905 29 November 2000 (29.11.2000) US

(71) Applicant (for all designated States except US):
GMP|VASCULAR, INC. [US/US]; One East Broward
Boulevard, Suite 1701, Fort Lauderdale, FL 33308 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): CRAWFORD, Neville
[GB/GB]; Mill Lane House, Mill Lane, Thorp Arch Vil-
lage, Wetherby, Yorkshire LS23 7DZ (GB).

(74) Agents: WARREN, William, L. et al.; Sutherland Asbill
& Brennan, LLP, 999 Peachtree Street, N.E., Atlanta, GA
30309-3996 (US).

(81) Designated States (national): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI,
SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU,
ZA, ZW.

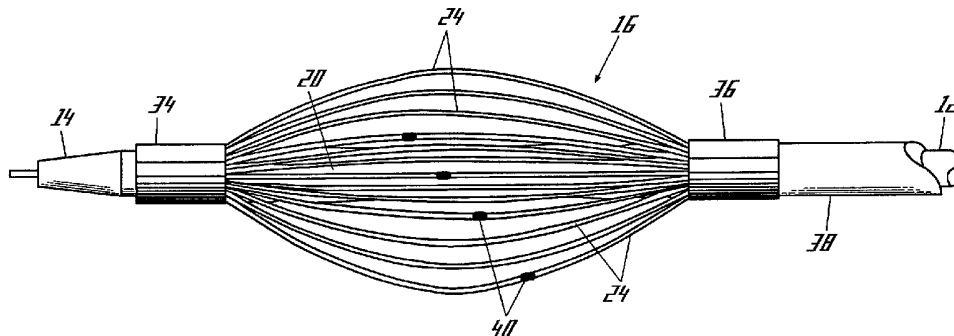
(84) Designated States (regional): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR,
GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent
(BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
NE, SN, TD, TG).

Published:
— with international search report

(88) Date of publication of the international search report:
17 April 2003

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: MULTI-SITE THERMOGRAPHIC PROFILING CATHETER



(57) Abstract: Catheter-based devices (10) for measuring tissue temperature at a number of sites. In particular, the present invention relates to catheter-based devices (10) that are able to measure tissue temperature and thermal heterogeneity in the tissue to help determine the presence of inflammation of the tissues. In addition, the present invention relates to catheter devices that, if used in arteries, veins, or compartments of the heart to measure tissue temperature, do not seriously compromise blood flow through the vessel during the measurement.



WO 02/043789 A3

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US01/44513

A. CLASSIFICATION OF SUBJECT MATTER		
IPC(7) : A 61 B 5/00 US CL : 600/549		
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. : 600/549,433,434,436; 604/523-532		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched None		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) EAST		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5,792,070 A (KAUPHUSMAN et al.) 11 August 1998, See Entire Disclosure	1-12
A	US 5,924,997 A (CAMPBELL) 20 July 1999, See Entire Disclosure	1-12
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.		
* Special categories of cited documents:		
"A"	document defining the general state of the art which is not considered to be of particular relevance	"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
"E"	earlier application or patent published on or after the international filing date	"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
"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"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
"O"	document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P"	document published prior to the international filing date but later than the priority date claimed	
Date of the actual completion of the international search		Date of mailing of the international search report
17 May 2002 (17.05.2002)		12 JUL 2002
Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703)305-3230		Authorized officer Pamela Wingood Telephone No. (703)308-0858