

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
5 June 2008 (05.06.2008)

PCT

(10) International Publication Number
WO 2008/066525 A3

(51) International Patent Classification:
A01N 1/02 (2006.01)

(21) International Application Number:
PCT/US2006/045715

(22) International Filing Date:
30 November 2006 (30.11.2006)

(25) Filing Language: English

(26) Publication Language: English

(71) Applicant and

(72) Inventor: DANCU, Michael, B. [US/US]; C/o Integrated
Biodynamics, Inc., 94 Wanaque Avenue, Suite 128, Pompton
Lakes, NJ 07442 (US).

CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS,
JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS,
LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY,
MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS,
RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN,
TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT,
RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA,
GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments

(74) Agents: FLESHNER, Mark, L. et al.; Fleshner & Kim,
LLP, 2325 Dulles Corner Blvd., Suite 1100, Herndon, VA
20171 (US).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,

(88) Date of publication of the international search report:
26 February 2009

(54) Title: SYSTEM AND METHOD FOR PRODUCING DYNAMIC CONDITIONS INCLUDING IN VIVO HEMODYNAMIC
CONDITIONS IN A THREE DIMENSIONAL TUBULAR STRUCTURE

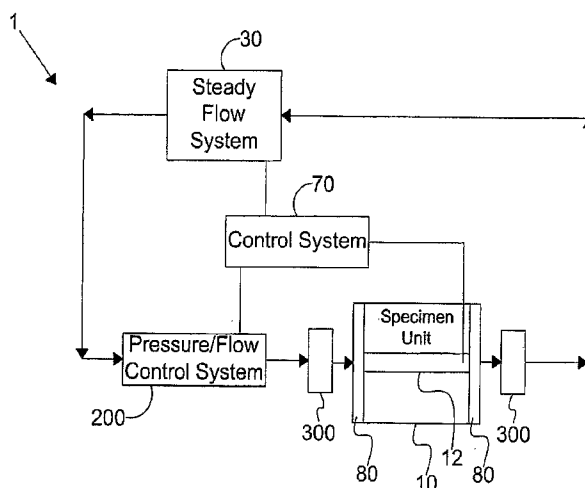


FIG. 1A

(57) Abstract: A system and method is provided for producing dynamic conditions, including in vivo dynamic conditions, in a specimen or any three-dimensional tubular structure, which passes fluid from one location to another. The system can produce pre-determined dynamic conditions in specified regions of the tubular structure or specimen, including second order dynamic conditions resulting from dynamic conditions produced by the system in conjunction with perturbations of the tubular structure.