

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
29 November 2007 (29.11.2007)

PCT

(10) International Publication Number
WO 2007/135680 A1

(51) International Patent Classification:

H04R 1/40 (2006.01) **H02N 13/00** (2006.01)
H04R 9/04 (2006.01) **H02K 7/10** (2006.01)
H02K 33/16 (2006.01) **H02K 16/00** (2006.01)

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(21) International Application Number:

PCT/IL2007/000622

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(22) International Filing Date: 21 May 2007 (21.05.2007)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/802,126 22 May 2006 (22.05.2006) US
60/907,450 2 April 2007 (02.04.2007) US
60/924,203 3 May 2007 (03.05.2007) US

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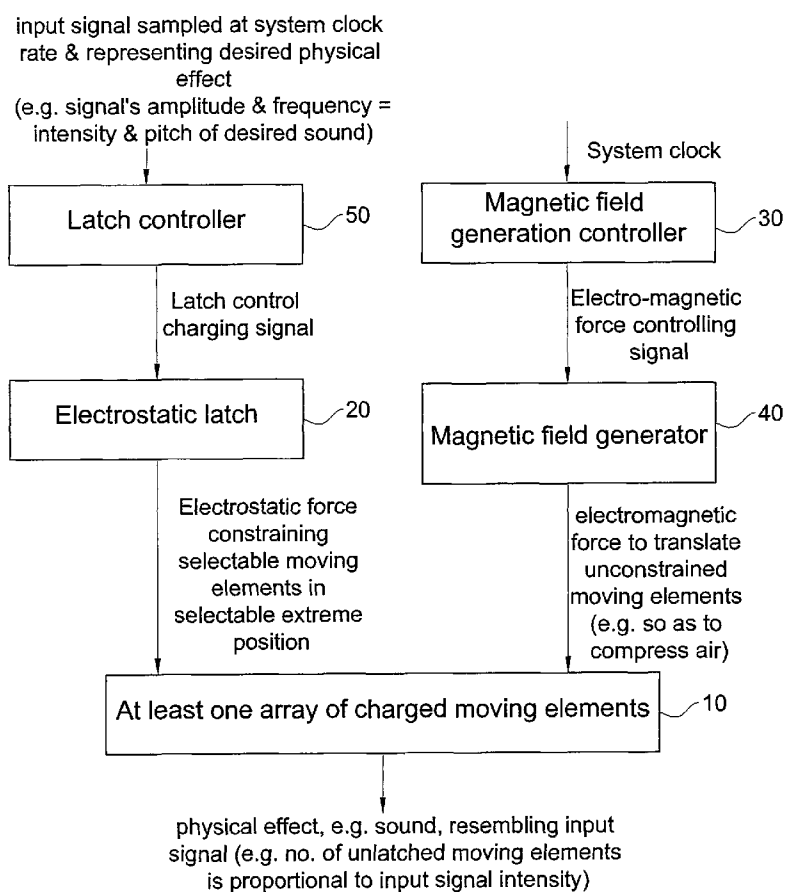
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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, 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),

[Continued on next page]

(54) Title: APPARATUS AND METHODS FOR GENERATING PRESSURE WAVES



(57) Abstract: Actuator apparatus for generating a physical effect, at least one attribute of which corresponds to at least one characteristic of a digital input signal sampled periodically in accordance with a clock, the apparatus comprising at least one array of moving elements each constrained to travel alternately back and forth along a respective axis in response to an alternating electromagnetic force applied to the array of moving elements, at least one latch operative to selectively latch at least one subset of said moving elements in at least one latching position thereby to prevent the individual moving elements from responding to the electromagnetic force, an electromagnetic field control system operative to receive the clock and, accordingly, to control application of the electromagnetic force to the array of moving elements, and a latch controller operative to receive the digital input signal and to control the latch accordingly.



European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, 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).

Declaration under Rule 4.17:

— *of inventorship (Rule 4.17(iv))*

Published:

- *with international search report*
- *with amended claims*

Date of publication of the amended claims: 24 January 2008

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