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[Continued on next page]

(54) Title: LOUDSPEAKER LINE ARRAY CONFIGURATIONS AND RELATED SOUND PROCESSING

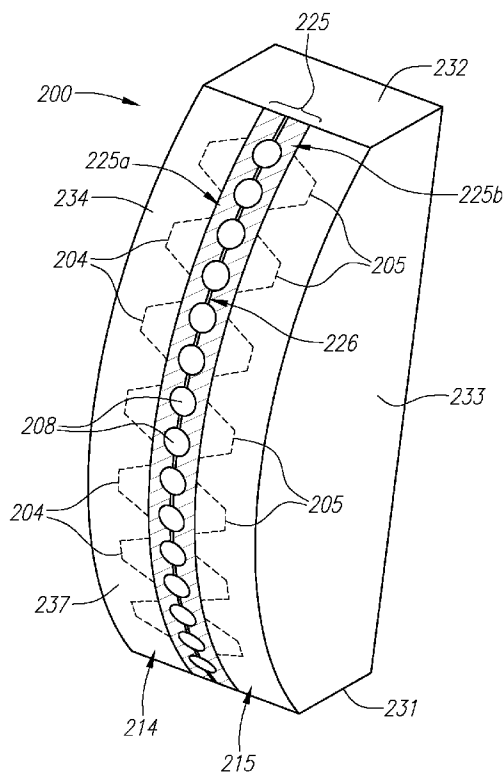


FIG. 2A

(57) Abstract: A sound reproduction system includes one or more arrays of drive units, coupled with sound processing allowing improved steerability, directional control, width control, and/or beam overlay. A speaker column may comprise two arrays facing one another, the drive units being perpendicular to the speaker unit front, with the acoustic output of each line array being compressed, turned and output from an elongate slot. The drive units may be staggered with respect to those in the opposing array. The arrays may be arc-shaped else straight. Selective delays to simulate an arced pattern. Differential delays applied to the drive units in a sub-array allow beam steering. Additional drive units, such as high frequency drivers, may be added along the length of the elongate slot or elsewhere to increase the dynamic frequency range of the speaker system. A collocated sound processor and amplifier output stage may be integrated with the speaker unit.



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A. CLASSIFICATION OF SUBJECT MATTER

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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)

H04R

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 practical, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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A	US 2006/153407 A1 (KEELE D B JR [US] ET AL) 13 July 2006 (2006-07-13) page 1, paragraph 8 - page 8, paragraph 91; figures 1-6	1-24
A	US 2004/006621 A1 (BELLINSON CRAIG ADAM [US] ET AL) 8 January 2004 (2004-01-08) page 10, line 1 - page 12, line 13; figures 1-15	1-24
A	EP 1 071 308 A (ADAMSON ALAN BROCK [CA]) 24 January 2001 (2001-01-24) column 7, paragraph 41 - column 13, paragraph 69; figures 1-8	1-24



Further documents are listed in the continuation of Box C.



See patent family annex.

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INTERNATIONAL SEARCH REPORT

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