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- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

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- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

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(54) **Title:** INTERACTIVE PLAY SET WITH CAPACITIVE SENSORS

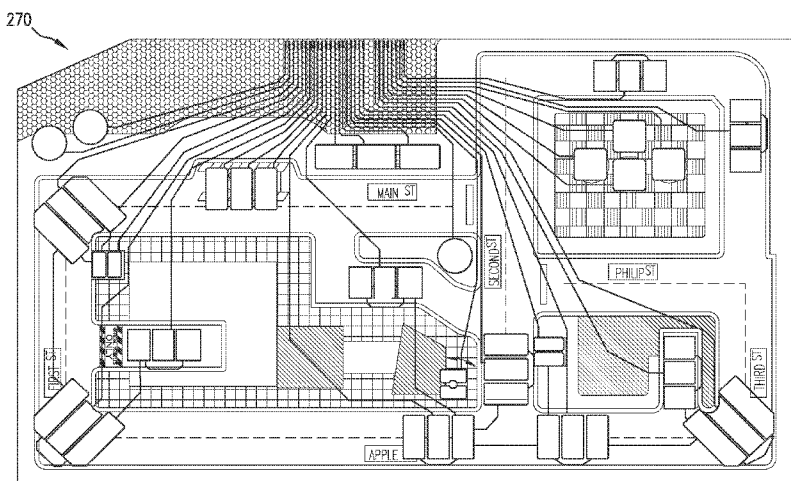


FIG. 19

(57) **Abstract:** Embodiments of an interactive play set with capacitive sensors, the play set configured to detect human touch, the presence or identity of small play objects, and play sound effects in response thereof. In some embodiments, play sets have capacitive sensors that detect the presence of play objects with coplanar sensor pads and ground pads in various geometries. In some embodiments, play sets have capacitive sensors that identify particular play objects by detecting the presence or absence of conductive tabs at a plurality of tab locations on each of the play objects.

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**A. CLASSIFICATION OF SUBJECT MATTER***A63F 3/00(2006.01)i, A63F 9/24(2006.01)i*

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)

A63F 3/00; G01L 1/14; A63F 9/24; G01R 27/26; G01R 27/28

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 data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) &amp; Keywords: capacitor, sensor, touch, enclosure, frame, air, gap, circuit, toy, object, piece, conductive, game, substrate, dielectric

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	US 2009-0315258 A1 (WALLACE MICHAEL et al.) 24 December 2009 See abstract, paragraphs 95,101,108-112, claim 1 and figures 3,10-13	1-5,7-13,22-27 6,14-21
A	US 2009-0309303 A1 (WALLACE MICHAEL et al.) 17 December 2009 See abstract, paragraphs 22,23,25 and figures 1-4	1-27
A	US 7301351 B2 (Alfred R. Deangelis et al.) 27 November 2007 See abstract, columns 3,12, claim 1 and figure 1	1-27
A	US 2010-0117660 A1 (DOUGLAS MALCOLM F. et al.) 13 May 2010 See abstract, paragraphs 22,23,25, claim 12 and figures 1,2	1-27

 Further documents are listed in the continuation of Box C. 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

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"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

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"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

"&amp;" document member of the same patent family

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**INTERNATIONAL SEARCH REPORT**

Information on patent family members

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