A light emitting system for an article includes a switch that manually selects from multiple modes of operation for lights. The article may be a toy, slumber bed, backpack, wearable article, or light emitting system for receiving a container. One mode provides illumination and a second mode provides flashing and/or multicolor effects. Another lighting system includes a lighting module with a lighting circuit having a motion switch or other type of sensor, an electronic switch, a biasing circuit, and a plurality of multi-color lights that change color. An article has a recess for receiving the lighting module. The controller controls different lamps disposed in regions of the lighting module based on movement or other external factor or force detected by the sensor. The regions include indicia that provide changing facial expressions by operating different lamps when detection of motion occurs repeatedly within predetermined time periods.
INTERNATIONAL SEARCH REPORT

International application No. PCT/US 15/36247

A.  CLASSIFICATION OF SUBJECT MATTER

IPC(8) - A47G 23/03, A63H 1/24 (2015.01)
CPC - F21V 33/0004, A63H 3/02, A63H3/006, F21Y 2101/02, F21Y 2101/02, A47G 2009/005

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)
CPC - F21V 33/0004, A63H 3/02, A63H3/006, F21Y 2101/02, F21Y 2101/02, A47G 2009/005
IPC(8) - A47G 23/03, A63H 1/24 (2015.01)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
IPC(8) - A47G 23/03, A63H 1/24 (2015.01); USPC - 360/231, 360/806, 446/219, 446/485

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
Patbase; Google, Google Patent

Search terms used: light LED diode puck disc disk cylinder color colour flash switch actuate button push press down coaster bottle glass toy plush stuffed inflatable fabric cover backpack pocket bedding

C.  DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
<thead>
<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
</tr>
</thead>
</table>
| X        | US 2004/01 14352 A1 (JENSEN) 17 June 2004 (17.06.2004), Fig 1, 2; para [0004], [0009], [0016], [0023]-[0027] | 1, 3, 6, 7
|          |                                                                                 | 8-10                 |
| Y        | US 2004/0067713 A1 (FONG) 08 April 2004 (08.04.2004), Fig 1-3, para [0015]-[0019] | 3, 4                 |
|          |                                                                                 | 5, 13, 14            |
| X        | US 7,520,633 B2 (HORNISBY et al.) 21 April 2009 (21.04.2009), Fig 1, 11, 17; col 1, ln 20-30; col 3, ln 10-20; col 1, ln 30-46; col 6, ln 23-24; col 2, ln 44-47 | 1, 11, 12
|          |                                                                                 | 15, 16               |
| A        | US 6,032,580 A (LEE) 07 March 2000 (07.03.2000); abstract; col 3, ln 56-col 4, ln 10 | 3, 4, 15, 16         |
|          |                                                                                 | 5                    |
| Y        | US 6,005,204 A (CHOI et al.) 21 December 1999 (21.12.1999), col 3, ln 40-57; col 7, ln 16-36 | 8, 9                 |
| Y        | US 7,419,072 B1 (VANELLA) 02 September 2008 (02.09.2008); col 3, ln 63-67; col 1, ln 6-7 | 10                   |
| A        | US 4,464,861 A (FOGARTY et al.) 14 August 1984 (14.08.1984); abstract; col 2, ln 39-43 | 5, 13, 14            |
| A        | US 2,745,947 A (SANSOUS) 15 May 1956 (15.05.1956); entire document | 1-16                 |

Further documents are listed in the continuation of Box C.

- Special categories of cited documents:
  - "A" document defining the general state of the art which is not considered to be of particular relevance
  - "E" earlier application or patent but published on or after the international filing date
  - "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)
  - "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
  - "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
  - "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
  - "Z" document member of the same patent family

Date of the actual completion of the international search
17 October 2015 (17.10.2015)

Date of mailing of the international search report
19 NOV 2015

Name and mailing address of the ISA/US
Mail Stop PCT, Attn: ISA/US, Commissioner for Patents
P.O. Box 1450, Alexandria, Virginia 22313-1450
Facsimile No. 571-273-8300

Authorized officer:
Lee W. Young
PCT Helpdesk: 571-272-4300
PCT DSP: 571-272-7774

Form PCT/ISA/210 (second sheet) (January 2015)
INTERNATIONAL SEARCH REPORT

International application No. PCT/US 15/36247

Box No. I
Observations where certain claims were found unsearchable

(Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. □ Claims Nos.:
   because they relate to subject matter not required to be searched by this Authority, namely:

2. □ Claims Nos.:
   because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. □ Claims Nos.:
   because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. II
Observations where unity of invention is lacking

(Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In order for all inventions to be examined, the appropriate additional examination fees must be paid.

Group I: Claims 1-16 drawn to a light emitting system for an article, having a mode selection switch.

Group II: Claims 17-20, drawn to a lighting module for wearable articles, having a motion sensor.

- see extra sheet -

1. □ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.

2. □ As all searchable claims could be searched without effort justifying additional fees, this Authority did not invite payment of additional fees.

3. □ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. □ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos. 1-16

Remark on Protest

□ The additional search fees were accompanied by the applicant’s protest and, where applicable, the payment of a protest fee.

□ The additional search fees were accompanied by the applicant’s protest but the applicable protest fee was not paid within the time limit specified in the invitation.

□ No protest accompanied the payment of additional search fees.
Continuation of Box No. III - Observations where unity of invention is lacking

The inventions listed as Groups I through II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

Special Technical Features

Group I includes the special technical feature of a mode selecting switch, not included in the other groups.

Group II includes the special technical feature of a motion sensor configured to provide a motion signal to a controller in response to motion, not included in the other groups.

Common Technical Features:

The only technical feature shared by Groups I and II that would otherwise unify the groups, is a light emitting system having a housing, the housing enclosing a lighting circuit and a controller. However, this shared technical feature does not represent a contribution over prior art, because the shared technical feature is disclosed by US 2010/0033958 A1 (Yan).

Yan discloses light emitting system having a housing, the housing enclosing a lighting circuit and a controller (Fig 3a, 3b; para [0030]-[0032]).

As the technical feature was known in the art at the time of the invention, this cannot be considered a special technical feature that would otherwise unify the groups.

Therefore, Groups I-II lack unity under PCT Rule 13.