Infrared touch system for flexible displays

A touch interface includes a plurality of emitters arranged along a first edge of a flexible electronics component to emit light that propagates across a surface of the flexible electronics component and a plurality of receivers arranged along a second edge of the flexible electronics component to detect light. The touch interface further includes a touch controller coupled to the plurality of emitters and the plurality of receivers. The touch controller is configured to cause one or more of the plurality of emitters to emit light, receive one or more signals indicative of detected light at the plurality of receivers, and determine at least one of a user interaction with the flexible electronics component or a current state of flexing of the flexible electronics component.
INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2015/026163

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - G06F3/042 (2015.01)
CPC - G06F3/0421 (2015.04)
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)
IPC(8) - G06F 3/00, 01, 03, 041, 042 (2015.01)
USPC - 345/173, 175, 176

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
CPC - G06F 3/00, 01, 03, 041, 0412, 0416, 042, 0428 (2015.04) (keyword delimited)

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
PatBase, Google Patents, Google
Search terms used: display, touch, light emitter, receiver

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>
<tbody>
<tr>
<td>Y</td>
<td>US 2013/0127765 A1 (NEONODE INC.) 23 May 2013 (23.05.2013) entire document</td>
<td>1-22</td>
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<td>A</td>
<td>US 2012/0194478 A1 (LIU et al.) 02 August 2012 (02.08.2012) entire document</td>
<td>1-22</td>
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Date of the international search completion
30 June 2015

Date of mailing of the international search report
20 JUL 2015

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