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Declarations under Rule 4.17:

— *as to the identity of the inventor (Rule 4.17(i))*

— *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))*

— *of inventorship (Rule 4.17(iv))*

Published:

— *with international search report (Art. 21(3))*

[Continued on next page]

(54) **Title**: HD BARCODE

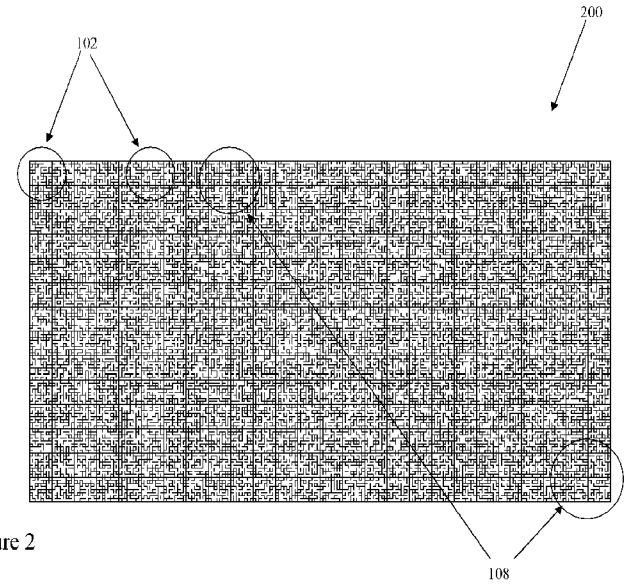

Figure 2

(57) **Abstract**: A bi-directional two-dimensional (2D) matrix barcode symbology for use with bar code, cell phones and other optical readers. A finder structure includes indicia for locating data blocks containing bytes of information encoded through bi-directional and orthogonal lines containing individual bits of information. Individual blocks contain error correction information, and are formed into 2 x 2 superblocks used to build larger codes. Intrinsic prefix information provides a redundant geometric identification for individual blocks within the overall structure, providing a built-in mapping of the overall structure, even when portions are missing or undecodable. The overall symbol has a second set of error correction parameters for further redundancy. The symbology is a versatile symbology in that the number of check data blocks is user selectable to provide the desired level of error correction.

WO 2011/126993 A3

— *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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INTERNATIONAL SEARCH REPORT

International application No.
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A. CLASSIFICATION OF SUBJECT MATTER

G06K 7/10(2006.01)i, G06K 9/18(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)

G06K 7/10; G06F 15/16; G01L 1/00; G06F 17/30; G06K 19/06

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) & Keywords: symbol, barcode, HD, bi-directional, data, block

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2009-0326836 A1 (HOVIS, GREGORY L et al.) 31 December 2009 See the abstract; figures 1,2; paragraphs 20-28; and claims 1-9	1-6
A	US 2009-0230193 A1 (AL-HUSSEIN, HUSSEIN et al.) 17 September 2009 See the abstract; figures 1-4; paragraphs 34-44; and claims 1-20	1-6
A	US 2010-0044445 A1 (KILICCOTE, HAN) 25 February 2010 See the abstract; figures 3-21; paragraphs 41-65; and claim 1	1-6
A	US 2009-0307232 A1 (HALL, EDWARD) 10 December 2009 See the abstract; figures 1-3; paragraphs 28-68; and claims 1-20	1-6

☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

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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

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"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
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Information on patent family members

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