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G06K 9/20 (2006.01)

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[Continued on next page]

(54) **Title**: ENHANCED VIRTUAL SCAN LINE PROCESSING

(57) **Abstract**: Systems and methods for decoding a barcode or other optical code include identifying one or more sub-regions of image data that contain promising data based on a first set of edge detection parameters, transferring the promising data from a first memory location to a new memory location for further processing, and decoding the promising data based on a different set of edge detection parameters.

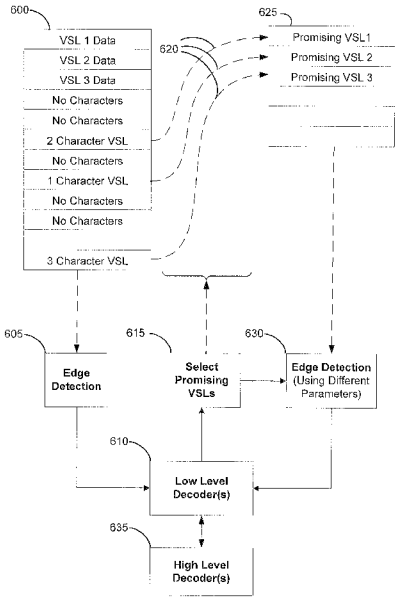

Figure 6

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A. CLASSIFICATION OF SUBJECT MATTER

G06K 7/10(2006.01)i, G06K 9/20(2006.01)i, G02B 5/00(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)
IPC : G06K

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 since 1975
Japanese Utility models and applications for Utility models since 1975

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
eKIPASS(KIPO Internal)
"Keywords: optical, code, image, edge, transition, data, decode, virtual, scan, character "

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6827273 B2 (DAVID M.WILZ,SR et al.) 07 December 2004 See column 10, line 56-column 11, line 42 and figures 1B1-1B4	1-25
A	WO 2006-049430 A1 (COLORZIP MEDIA INC.) 11 May 2006 See abstract, claims 31-38 and figures 21-22	1-25
A	US 6981644 B2 (CHEOL HO CHEONG et al.) 03 January 2006 See claim 1 and figures 1A-1B	1-25
A	KR 10-2001-0044743 A (KIM JI YOUNG et al.) 05 June 2001 See claims 1-5 and figures 2-3	1-25

☐ 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
"E" earlier application or patent but published on or after the international filing date
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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
"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
"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
30 JUNE 2009 (30.06.2009)	**30 JUNE 2009 (30.06.2009)**

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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