



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/01738

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G06K 15/00

US CL : 235/383

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)

U.S. : 235/383, 375, 385, 462.01, 462.13, 462.14, 462.32, 463.43; 902/22, 30; 705/16, 17, 20, 21, 22, 23, 24, 25, 416; 177/25.15

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

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

USPAT, USPGPUB, EPO, JPO, DERWENT, IBM-TDB

search terms: bioptical, vertical, horizontal, barcode, bar code, scanner, point of sale, pos, scale, keypad, display, Internet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,886,336 A (Tang et al) 23 March 1999 (23.03.1999), figures 1, 2, col. 2, line 65 - col. 3, line 27, col. 3, line 41 - col. 4, line 8.	1-174
Y	US 5,153,585 A (Negishi et al) 06 October 1992 (06.10.1992), figures 1-3, col. 2, line 32 - col. 3, line 12, col. 5, lines 24-35.	1-174
Y	US 5,256,863 A (Ferguson et al) 26 October 1993 (26 October 1993), see entire document.	1-174
Y	US 5,950,173 A (Perkowski) 07 September 1999 (07.09.1999), see entire document.	1-174

☒ Further documents are listed in the continuation of Box C.
 ☐ See patent family annex.

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

Date of the actual completion of the international search	Date of mailing of the international search report
06 APRIL 2003	09 JUL 2003
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