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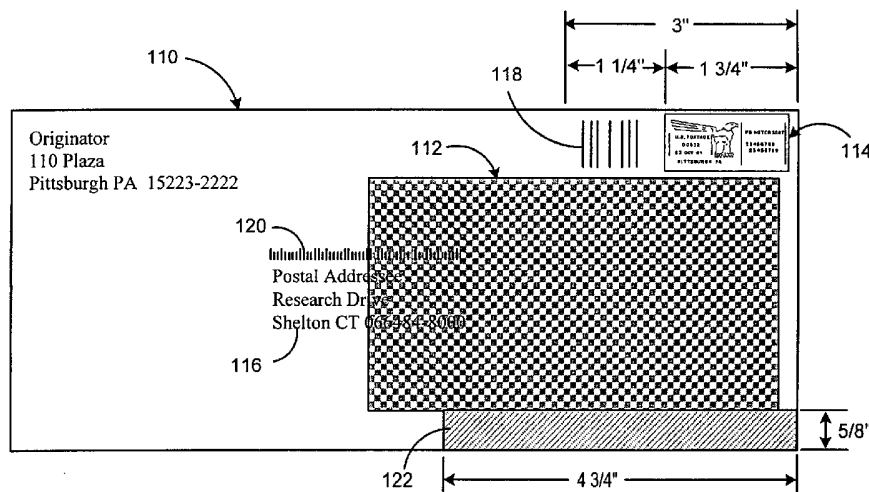
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(54) Title: PRINTING HIGH INFORMATION DENSITY MACHINE-READABLE COMPOSITE IMAGES



(57) Abstract: Machine-readable light-colored or invisible, but luminescent, postage-evidencing symbology and dark, readable other postage information are printed, preferably in a single print operation, to provide large amounts of information without diminishing read rates. The resulting combination image can be printed independent of substrate material to enable the provision of a high information density without obscuring any one component. The postage-evidencing symbology is printed in large-format and can include redundant information within an IBI image or between an IBI and visible dark image for a variety of practical purposes. In a preferred form, the images are printed using conventional ink jet printers using water-based inks. In one embodiment of this type, the images are printed with a conventional two-cartridge color ink jet printer by printing postage-evidencing symbology with a single-color ink and printing the visible dark image as a composite dark color from a standard multi-color cartridge.

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# INTERNATIONAL SEARCH REPORT

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PCT/US03/19989

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(7) : B41J 02/01; G06K 19/00  
 US CL : 347/101,100; 235/487,494

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. : 347/101,100,96; 235/487,494,468,491; 250/271; 705/1

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
 NONE

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
 EAST (visible and invisible, mail piece)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	US 6,106,110 A (Gundjian et al) 22 August 2000 (19.08.2000), column: 3, lines 34-65; column 6, lines 40-65; figures 1-3	1-5,7,10,29-33,35,46-48 ----- 6,9,12-13,34,38-40,50-51
X --- Y	US 6,142,380 A (Sansone et al) 07 November 2000 (07.11.2000), column 3, lines 25-50; figures 1-4 column 2, lines 43-55; column 3, lines 25-45; column 4, lines 35-40	18-20,43-45 ----- 9,34
Y	US 5,502,304 A (Berson et al) 26 March 1996 (26.03.1996), column 3, line 65-67; column 4, lines 1-30; column 7, lines 15-20; figures 1-3	6,12-13,38-40,50-51

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

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"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
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