



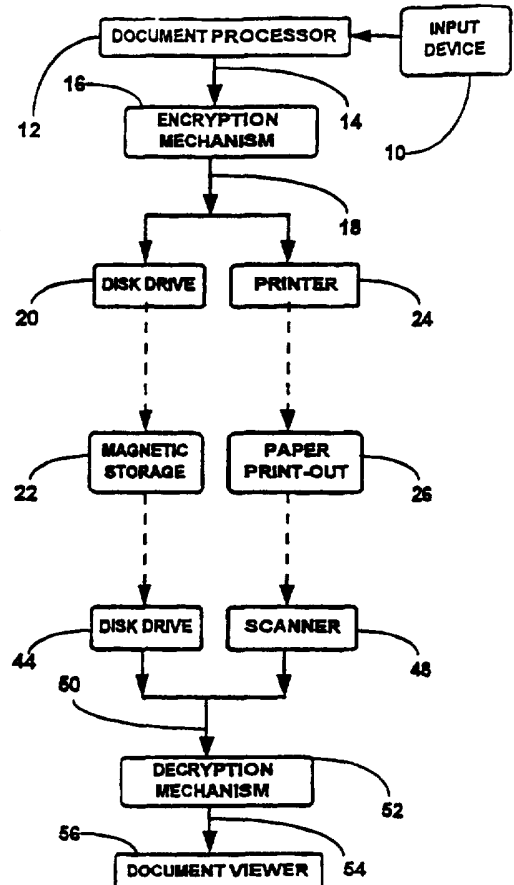
INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<p>(51) International Patent Classification <sup>6</sup> : <b>H04L 9/00, G06F 17/21</b></p>	<p><b>A3</b></p>	<p>(11) International Publication Number: <b>WO 97/09817</b> (43) International Publication Date: 13 March 1997 (13.03.97)</p>
<p>(21) International Application Number: PCT/IL96/00088 (22) International Filing Date: 26 August 1996 (26.08.96) (30) Priority Data: 115079 27 August 1995 (27.08.95) IL 115277 12 September 1995 (12.09.95) IL 116218 30 November 1995 (30.11.95) IL (71) Applicant (for all designated States except US): ALIROO LTD. [IL/IL]; 19 Trumpeldor Street, 44442 Kfar Sava (IL). (72) Inventors; and (75) Inventors/Applicants (for US only): POMERANTZ, Itzhak [IL/IL]; 18 Golomb Street, 44357 Kfar Sava (IL). MENCZER, Emanuel [IL/IL]; 25 Ahava Street, 45282 Hod Hasharon (IL). COHEN, Ram [IL/IL]; 13 Bartenura Street, 62282 Tel Aviv (IL). (74) Agents: COLB, Sanford, T. et al.; Sanford T. Colb &amp; Co., P.O. Box 2273, 76122 Rehovot (IL).</p>		<p>(81) Designated States: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, ARIPO patent (KE, LS, MW, SD, SZ, UG), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). <b>Published</b> <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i> (88) Date of publication of the international search report: 01 May 1997 (01.05.97)</p>

(54) Title: DOCUMENT PROCESSING

(57) Abstract

A secure document processing system including a document processor having an input device (10) for inputting information in a non-secure form, an information storage medium (20, 22, 44) associated with the document processor, and encryption apparatus (16) associated with the document processor and with the information storage medium and being operative to encrypt all information received from the document processor prior to storage thereof by the information storage medium in a secure form. There is also provided a system for selectable encryption of documents including a document generator and a user-controlled document encryptor operative to encrypt user-selected portions of a document generated on the document generator.



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# INTERNATIONAL SEARCH REPORT

I national application No.  
PCT/IL96/00088

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(6) :H04L 9/00; G06F 17/21  
US CL :380/4

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. : 380/4, 25; 395338, 792, 802; 364/261, 261.1, 261.2

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)

APS  
search terms: encrypt?, automatic backup, cut and paste, document and (select?(2a)portion#), copy command

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X, E	US 5,584,023 A (HSU) 10 DECEMBER 1996, col. 3, lines 18-44.	1, 4, 7, 8, 11,15.
Y	US 5,212,784 A (SPARKS) 18 May 1993, col. 4, lines 24-52, col. 7, lines 43-46.	2, 3, 5, 6, 9, 10, 12, 13.
X, P	US 5,504,818 A (OKANO) 02 APRIL 1996, col. col. 3, lines 29-37, col. 8, lines 26-54.	16-41.
Y	US 5,313,564 A (KAFRI ET AL) 17 MAY 1994, col. col. 13, lines 34-49.	24, 25, 38, 39
A	US 5,392,386 A (CHALAS) 21 FEBRUARY 1995, col. 2, line 38-col. 3, line 10.	42-63.
A	US 4,947,346 A (KAMIYA) 07 AUGUST 1990, col. 1, lines 43-53.	42, 53.

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

<p>* Special categories of cited documents:</p> <p>*A* document defining the general state of the art which is not considered to be of particular relevance</p> <p>*B* earlier document published on or after the international filing date</p> <p>*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)</p> <p>*O* document referring to an oral disclosure, use, exhibition or other means</p> <p>*P* document published prior to the international filing date but later than the priority date claimed</p>	<p>*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</p> <p>*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</p> <p>*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</p> <p>*A* document member of the same patent family</p>
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Date of the actual completion of the international search <b>11 MARCH 1997</b>	Date of mailing of the international search report <b>27 MAR 1997</b>
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Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703) 305-3230	Authorized officer <i>Walter Gordon</i> <b>GILBERTO BARRON</b> Telephone No. (703) 306-4177
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# INTERNATIONAL SEARCH REPORT

I national application No.  
PCT/IL96/00088

## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5,157,763 A (PETERS ET AL) 20 OCTOBER 1992, col. 2, lines 57-65.	18, 32.

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/IL96/00088

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This international report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1.  Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
  
2.  Claims Nos.:  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
  
3.  Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

Please See Extra Sheet.

1.  As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2.  As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3.  As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
  
4.  No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- The additional search fees were accompanied by the applicant's protest.  
 No protest accompanied the payment of additional search fees.

# INTERNATIONAL SEARCH REPORT

I national application No.  
PCT/IL96/00088

## BOX II. OBSERVATIONS WHERE UNITY OF INVENTION WAS LACKING

This ISA found multiple inventions as follows:

Group I, claim(s) 1-15, drawn to a secure document processing method.

Group II, claim(s) 16-41, drawn to a system for selectable encryption/decryption of documents.

Group III, claim(s) 42-63, drawn to a computing system and method.

The inventions listed as Groups I, II and III do not relate to a single inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: Group I is directed to a secure document system providing for the special technical feature of automatic encryption of information before storage to a storage medium. Group II provides for the special technical feature of selectable encryption/decryption for portions of a document being generated. Group III is directed to a computing system and method providing for the special technical feature of an operating command that in one environment operates in one mode and in a second environment operates in a second mode.

The special technical feature of each group is not common to any other group.