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(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,

Published: with international search report

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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.

(54) Title: INFORMATION RECORD INFRASTRUCTURE, SYSTEM AND METHOD

(57) Abstract: A method of maintaining digital medical records, comprising a step of receiving a medical transaction record (102), encrypted with a key in accordance with a patient-file association. Also comprising a step of accessing the encrypted medical transaction record according to a patient association with the record (111). And further comprising a step of re-encryption of the encrypted accessed medical transaction record with a key associated with an intended recipient of the medical record. The system and method according to the present invention presents a new business model for creation, maintenance, transmission, and use of medical records. The invention also allows financial burdens to be reallocated optimally and equitably, resulting in decreased overall societal cost and providing a successful business model for a database proprietor. Secure entrusted medical records are held in trust by an independent third party on behalf of the patient (113), and serve the medical community at large. Separately encrypted record elements may be aggregated as an information polymer.
**INTERNATIONAL SEARCH REPORT**

**A. CLASSIFICATION OF SUBJECT MATTER**

| IPC(7) | H04L 9/00, 9/32 |
| US CL | 380/25, 713/176 |

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.: 380/25, 713/176

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

Public Key Infrastructure literature.

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

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

<table>
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<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
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**Date of the actual completion of the international search**

17 October 2001 (17.10.2001)

**Date of mailing of the international search report**

11 JAN 2002

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<td>Y</td>
<td>US 5,579,393 A (Connor et al.) 26 November 1996 (26.06.96), Abstract, figure 2A, figures 3A and 3B, figures 4-6, figure 8A, figure 18, columns 6 and 7.</td>
<td>2, 7, 9, 11-12, 18-23, 33-34, 36-37, 40-43, 47-48, 52-56, 59, 64, 66, 68-70, 75-81, 86, 94, 97-100, 103-105, 109, 111-112, 118-119, 124, 127-131, 134-141, 143.</td>
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