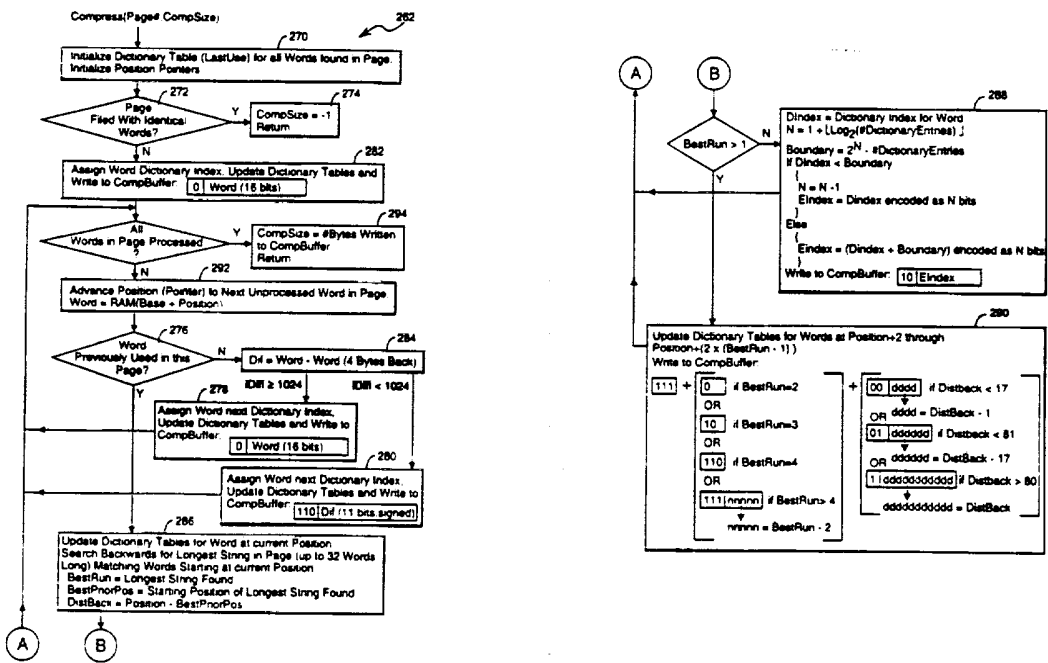




INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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<p>(21) International Application Number: PCT/US94/14560 (22) International Filing Date: 29 December 1994 (29.12.94) (30) Priority Data: 08/175,749 30 December 1993 (30.12.93) US (71) Applicant: CONNECTIX CORPORATION [US/US]; 2655 Campus Drive, San Mateo, CA 94403 (US). (72) Inventors: GARBER, Jonathan, F.; 13503 Skyline Boulevard, Woodside, CA 94062 (US). BROWN, Jorg, A.; 1516 Wicket Court, Concord, CA 94518 (US). WALTERS, Chad, Perry; 550 Middlefield Avenue, Palo Alto, CA 94301 (US). (74) Agents: WILLIAMS, Gary, S. et al.; Flehr, Hohbach, Test, Albritton &amp; Herbert, Suite 3400, 4 Embarcadero Center, San Francisco, CA 94111-4187 (US).</p>	<p>(81) Designated States: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, UZ, VN, European patent (AT, BE, CH, DE, DK, ES, 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), ARIPO patent (KE, MW, SD, SZ). <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: 10 August 1995 (10.08.95)</p>	

(54) Title: LOSSLESS DATA COMPRESSION SYSTEM AND METHOD



(57) Abstract

A lossless data compression system and method compresses a set of M data words stored in a computer memory. A first table stores data representing last occurrence positions among those of the M data words already processed for all distinct word values. A second table stores for each data word an entry word with the same word value. A dictionary index (282) indicates how many distinct data word values have been encountered during processing of M data words. The M data words are processed in sequential order. For each data word, it is determined by referencing the first table whether at least one data word with the same word value is located earlier in the M data words. When the data word being processed is unequal to all previously processed data words, a code representing the data word's value is output.

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INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US94/14560

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(6) : G06F 12/08, 13/00; H03M 7/30  
US CL : 395/400, 425; 341/51, 87, 106

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. : 395/400, 425; 341/51, 87, 106

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

**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, A 4,464,650 (EASTMAN et al.) 07 August 1984, entire document	1-5 ----- 6
Y	US, A 5,237,460 (MILLER et al.) 07 August 1993, entire document	6
A	US, A 4,989,134 (SHAW) 29 January 1991	6

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

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