US007974339B2

(12) **United States Patent**
Krichevsky et al.

(10) **Patent No.: US 7,974,339 B2**
(45) **Date of Patent: Jul. 5, 2011**

(54) **OPTIMIZED DATA TRANSMISSION SYSTEM AND METHOD**

(76) Inventors: **Alex Krichevsky**, Laguna Beach, CA (US); **Constance Nash**, Laguna Beach, CA (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 1401 days.

(21) Appl. No.: **10/892,690**

(22) Filed: **Jul. 16, 2004**

(65) **Prior Publication Data**

US 2004/0258150 A1 Dec. 23, 2004

Related U.S. Application Data

(63) Continuation of application No. PCT/US02/00503, filed on Jan. 16, 2002.

(51) **Int. Cl.**
H04N 7/12 (2006.01)

(52) **U.S. Cl.** **375/240.01**

(58) **Field of Classification Search** 375/240.01, 375/240.15, 240.23; 380/54; 382/239, 236; 348/699

See application file for complete search history.

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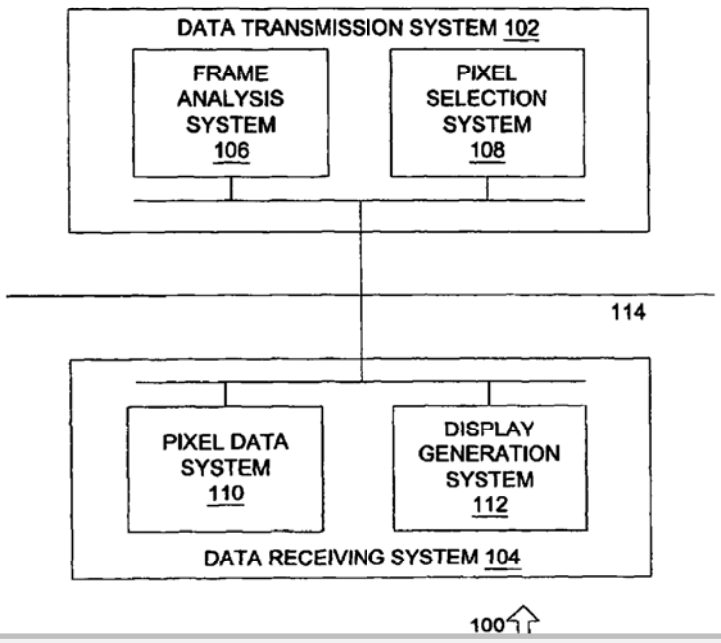
Primary Examiner — Tung Vo

(57) **ABSTRACT**

A system for transmitting data is provided. The system includes a frame analysis system receiving frame data, such as a frame of video data, and generating region data, such as a uniform matrix size that is used to divide the frame into a predetermined set of matrices. A pixel selection system receives the region data and generates one set of pixel data for each region, such as by selecting one of the pixels contained within each of the original matrices that comprise the frame.

13 Claims, 4 Drawing Sheets



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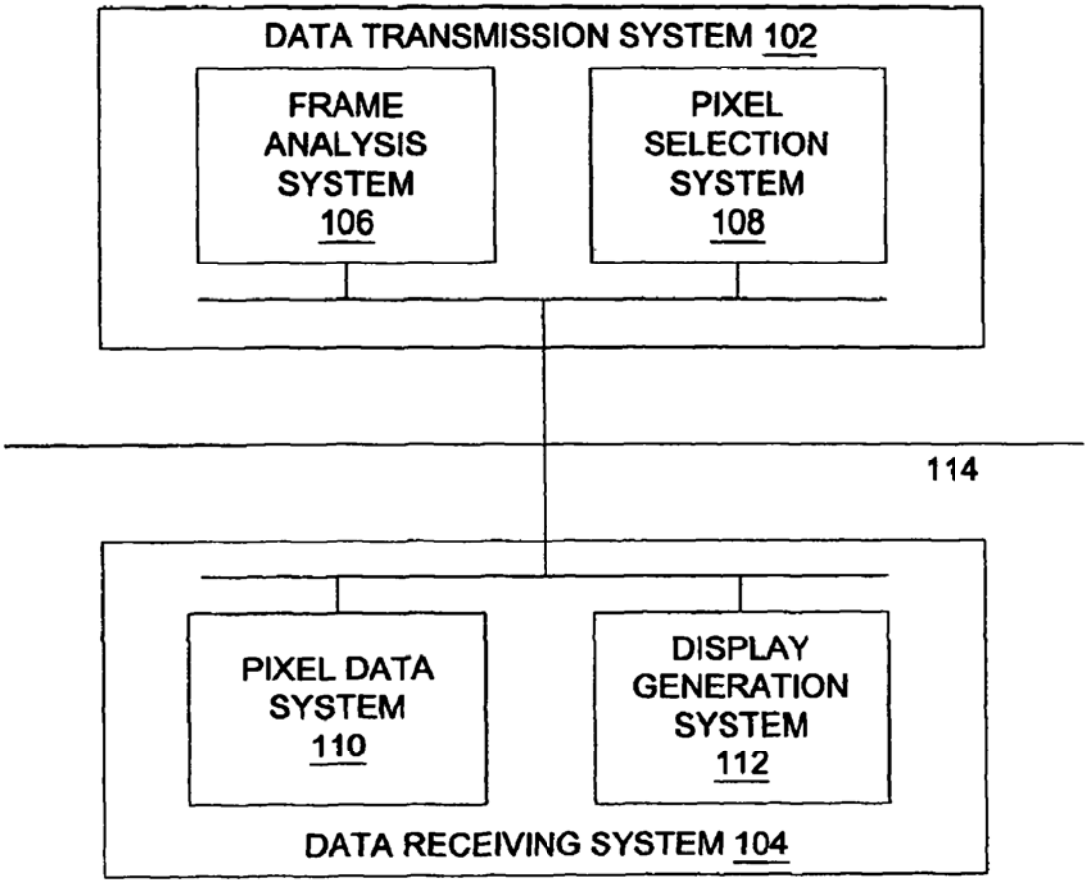

FIGURE 1 100

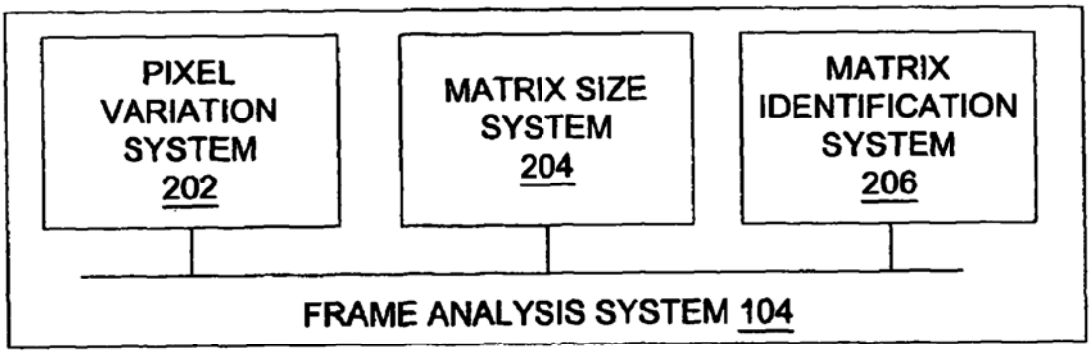

FIGURE 2 200

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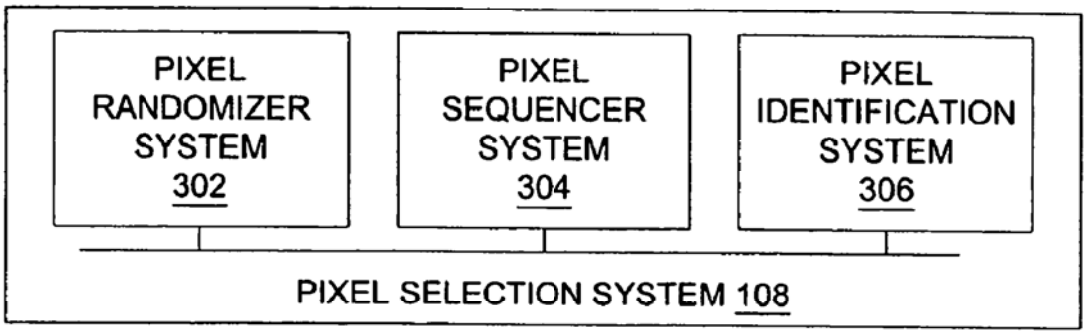

FIGURE 3 300

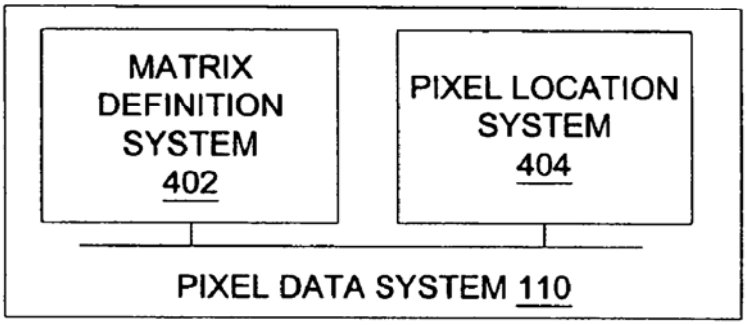

FIGURE 4 400

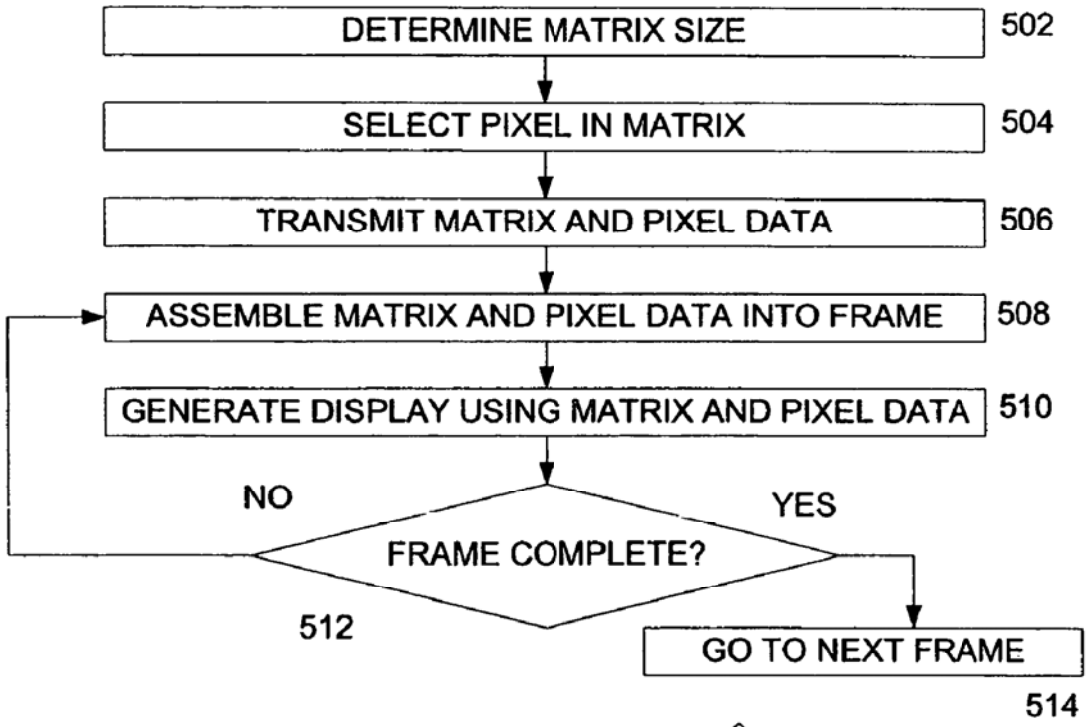

FIGURE 5 500

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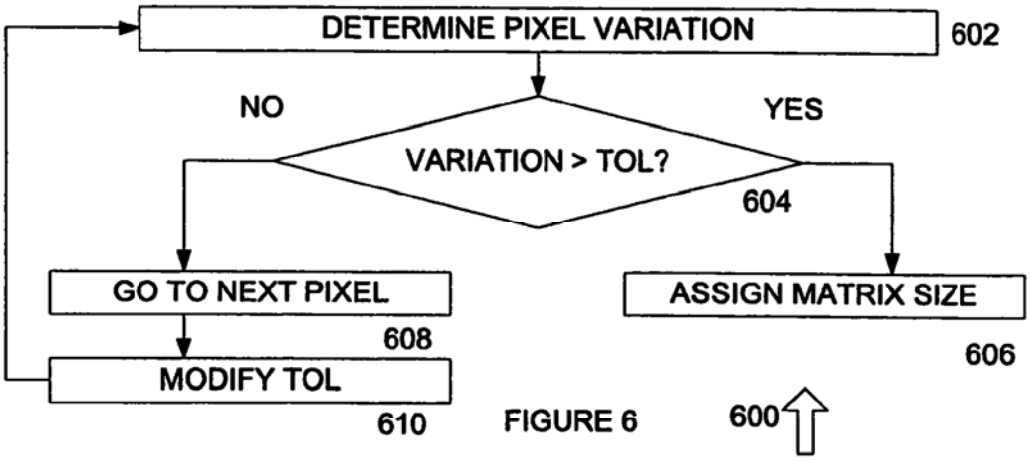

FIGURE 6

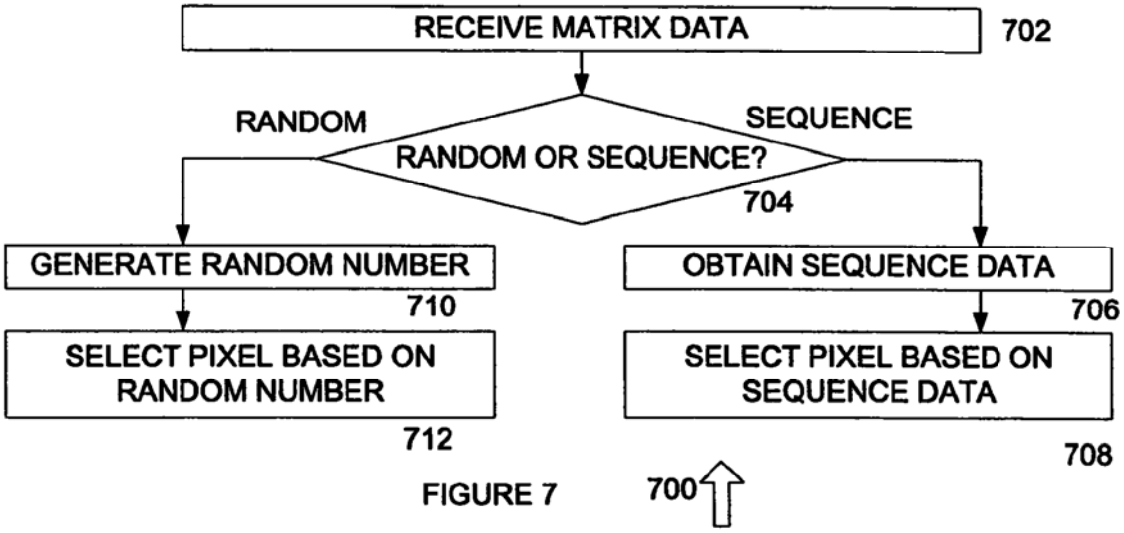

FIGURE 7

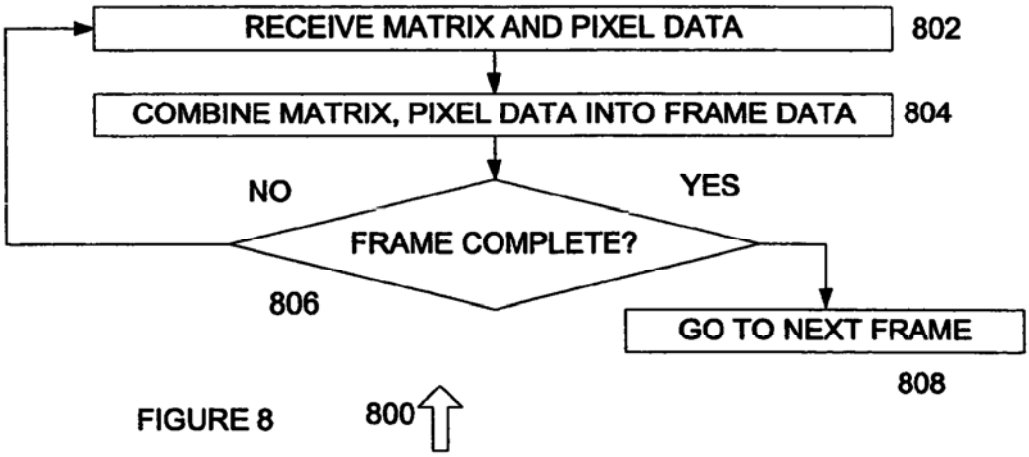

FIGURE 8

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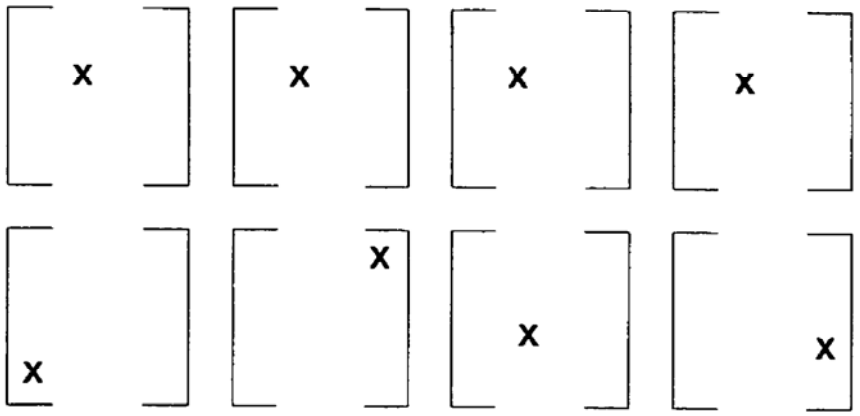

FIGURE 9 900

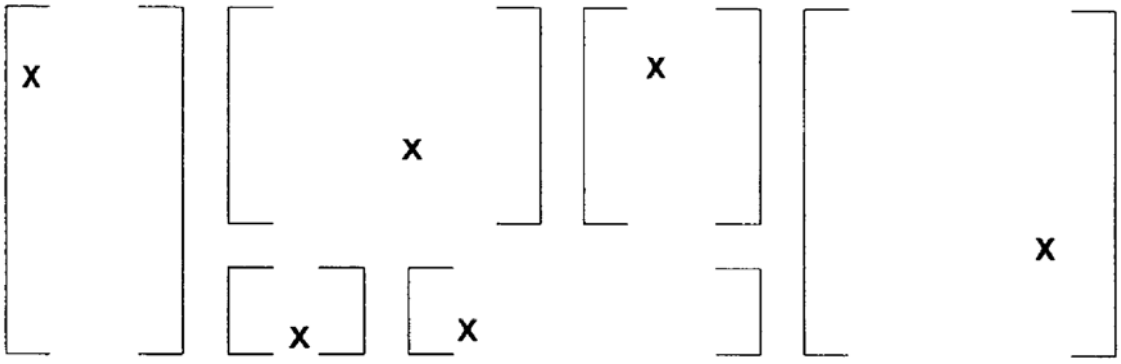

FIGURE 10 1000

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