

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

(10) **Patent No.:** **US 10,499,091 B2**
 (45) **Date of Patent:** **Dec. 3, 2019**

(54) **HIGH-QUALITY, REDUCED DATA RATE STREAMING VIDEO PRODUCTION AND MONITORING SYSTEM**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **15/614,137**

(22) Filed: **Jun. 5, 2017**

(65) **Prior Publication Data**
 US 2017/0272791 A1 Sep. 21, 2017

Related U.S. Application Data

(63) Continuation of application No. 10/664,244, filed on Sep. 17, 2003.
 (Continued)

(51) **Int. Cl.**
H04N 7/173 (2011.01)
H04N 21/2343 (2011.01)
 (Continued)

(52) **U.S. Cl.**
 CPC ... **H04N 21/234354** (2013.01); **G11B 27/031** (2013.01); **G11B 27/034** (2013.01);
 (Continued)

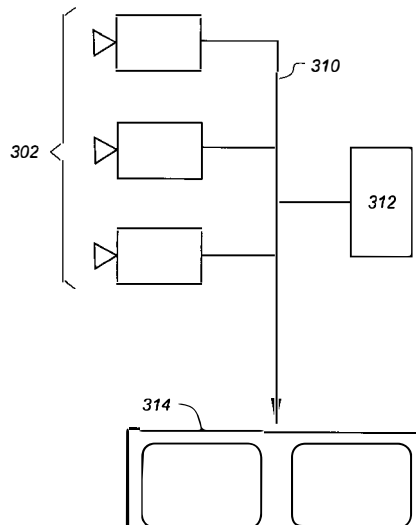
(58) **Field of Classification Search**
 CPC H04N 21/4223; H04N 5/23206; H04N 21/6125; H04N 21/6175; H04N 21/2187; H04N 7/181
 See application file for complete search history.

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(57) **ABSTRACT**
 A multi-format digital video production system is capable of maintaining full-bandwidth resolution of subject material while providing professional quality editing and manipulation of images intended for digital television and other applications, including digital HDTV programs and specialized video monitoring applications. This allows emerging broadband video transmission media, including Internet broadcast schemes, to overcome existing technology limitations. The approach facilitates high-quality/large-screen video production and monitoring through the use of conventional broadband channels, including those which currently only exhibit bandwidths on the order of 4 Mbps. In formats utilizing substantially 24 fps progressive scan multi-format system, direct streaming is made possible from HDTV (16:9) high-quality data, thereby expanding market applications which require these higher levels of resolution, bits per pixel, and so forth.

6 Claims, 3 Drawing Sheets



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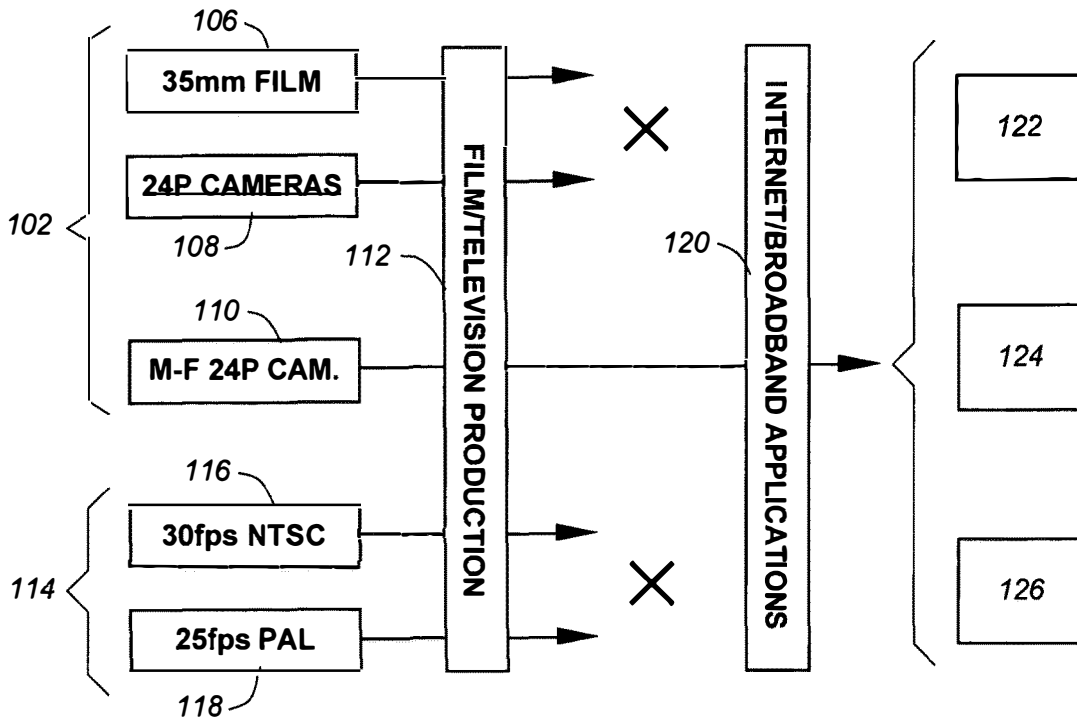


Fig - 1

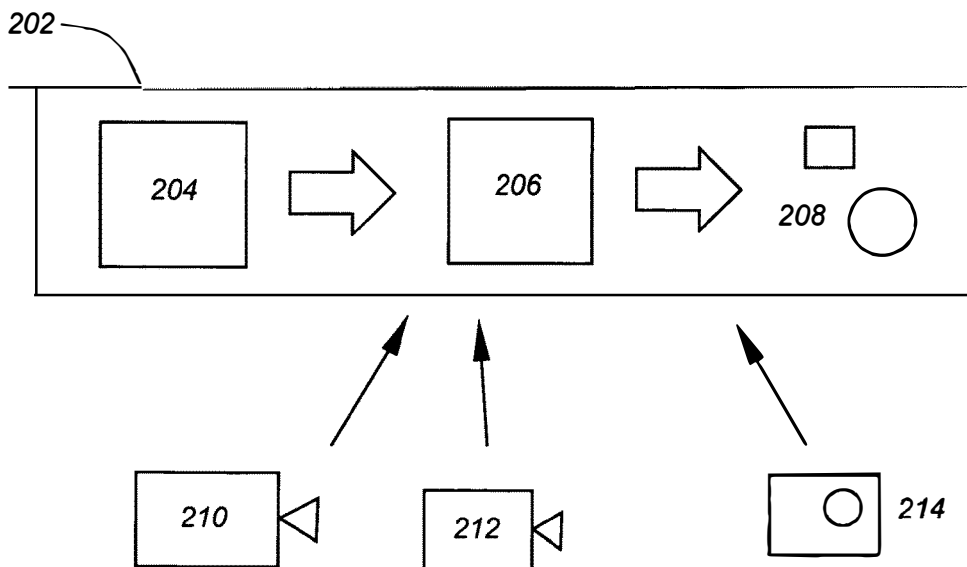


Fig - 2

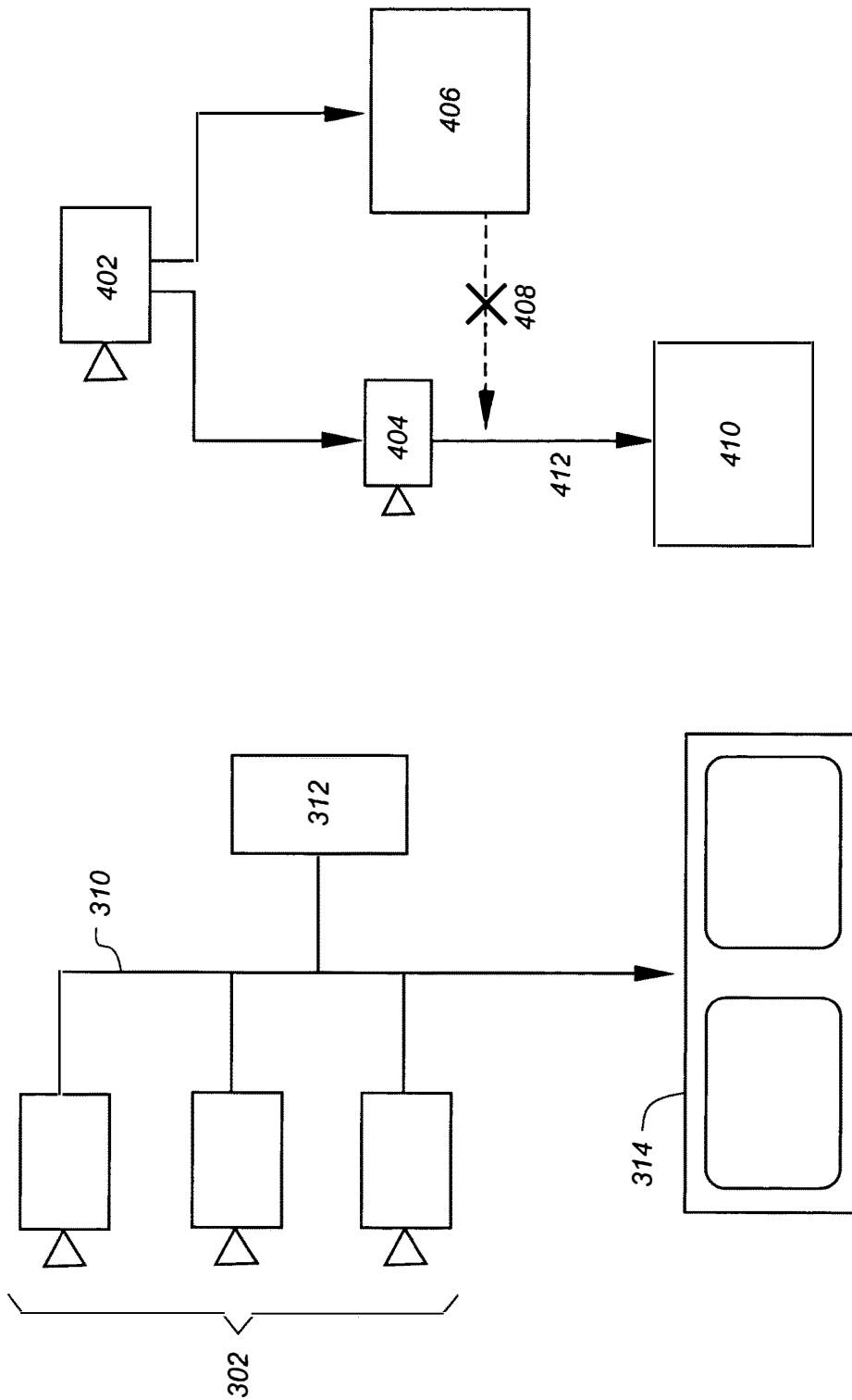


Fig - 4

Fig - 3

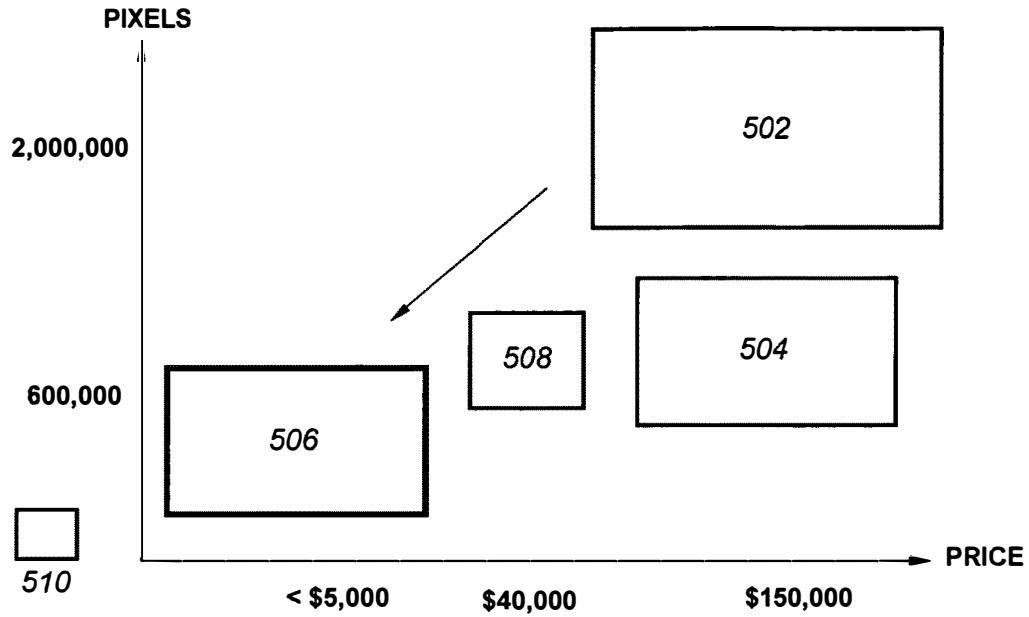


Fig - 5

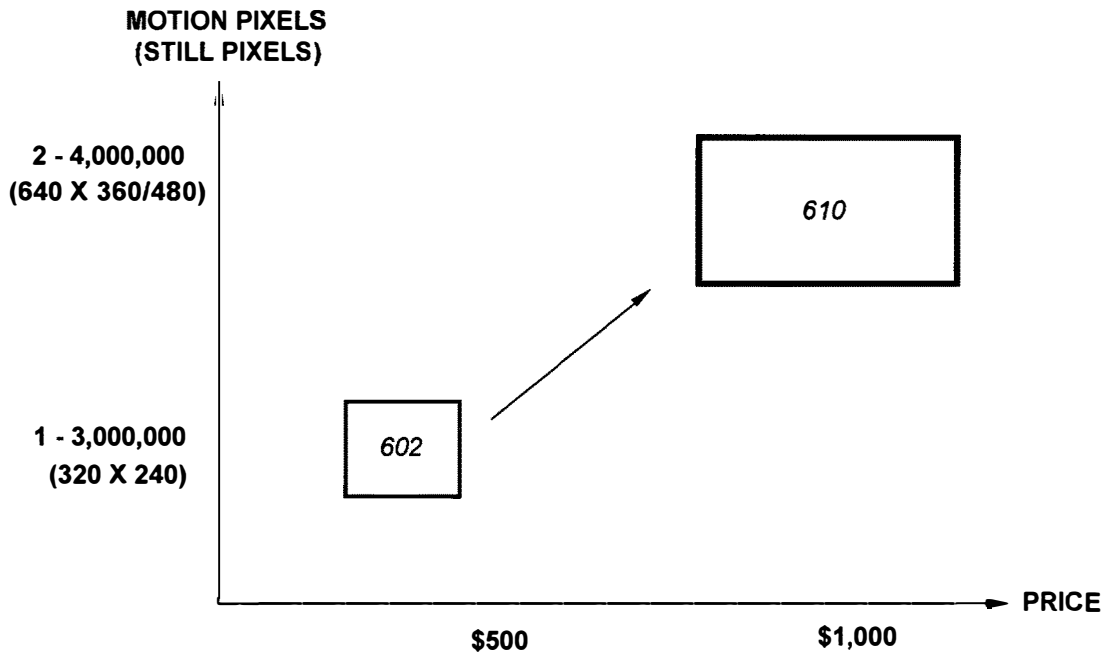


Fig - 6

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