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Tiernan et al.

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(54) **METHOD FOR UNIVERSAL MESSAGING AND MULTIPLEXING OF VIDEO, AUDIO, AND DATA STREAMS**

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(*) Notice: Under 35 U.S.C. 154(b), the term of this patent shall be extended for 0 days.

(21) Appl. No.: **08/675,558**

(22) Filed: **Jul. 3, 1996**

Related U.S. Application Data

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(51) **Int. Cl.**⁷ **H04J 3/24**
(52) **U.S. Cl.** **370/473; 370/465**
(58) **Field of Search** **370/366, 474, 370/469, 467, 535, 536, 537, 395, 389, 396, 517, 538, 397, 473, 353, 419, 465, 466, 498, 539, 541; 348/461, 467**

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Primary Examiner—Douglas W. Olms

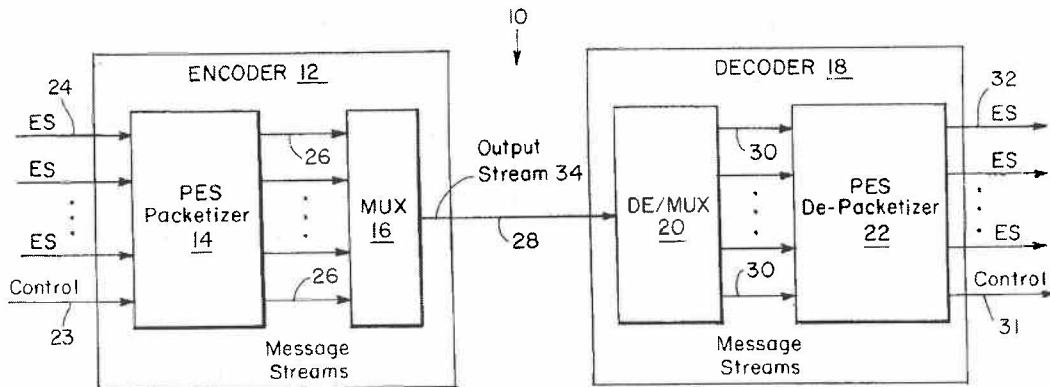
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(57) **ABSTRACT**

A method is disclosed for supplying arbitrary types of information in a digital signal conformant to the structures defined in ISO standard ISO/IEC 13818-1, known generally as MPEG2 Systems. The method extends Program Stream and Transport Stream structures by application of principles developed for standardization of bidirectional data communications protocols to define a universal messaging syntax applicable to all types of information, including Internet data streams, VBI data streams, other types of data streams, as well as MPEG2 video, audio, and control; to define a multiplexing structure that is independent of the details of the MPEG2 signal structure; and to define a scheme for addressing such enhanced MPEG2 signals, or portions of signals, to individual decoders or to groups of decoders.

40 Claims, 6 Drawing Sheets



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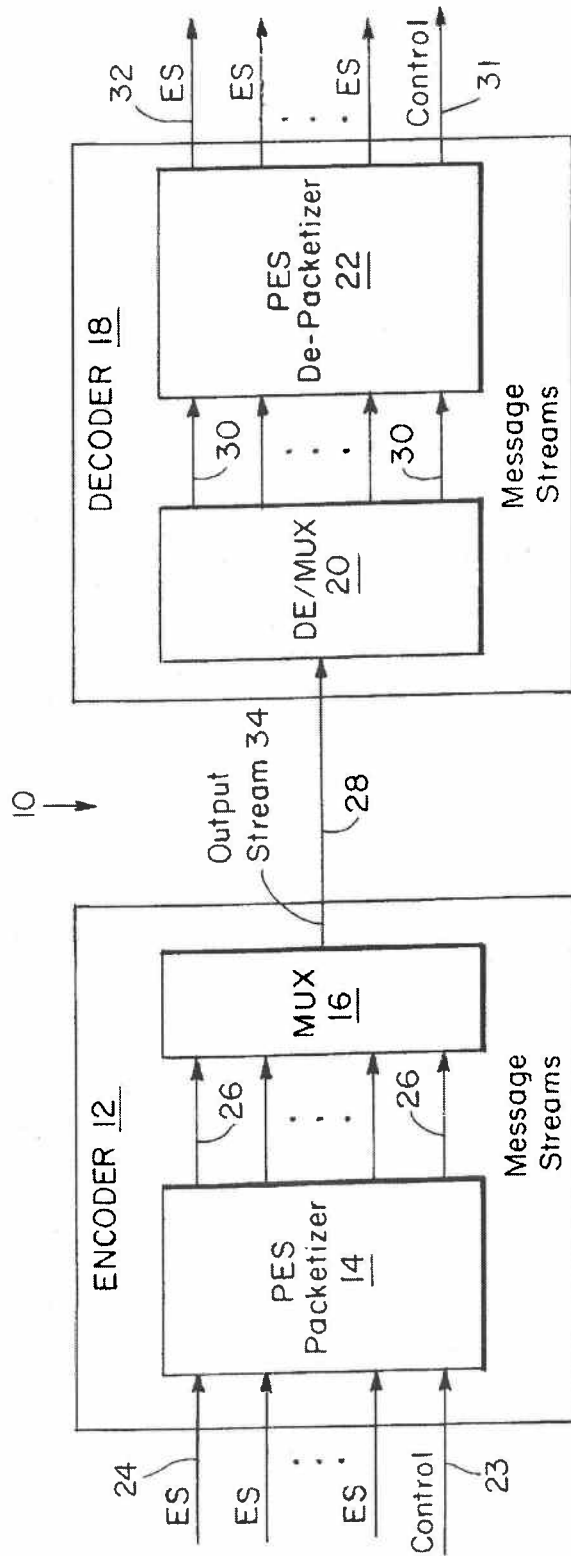


FIG. 1

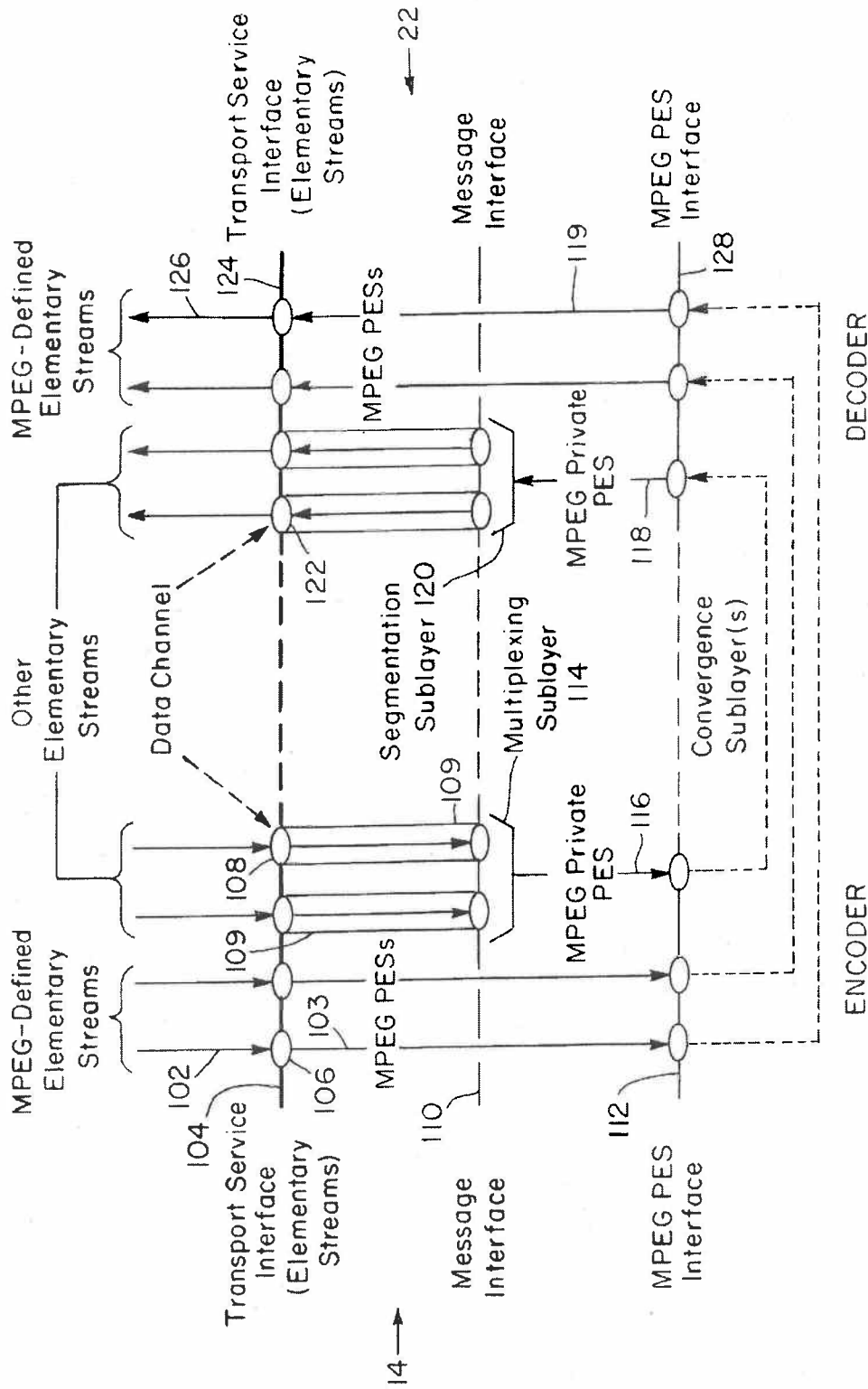


FIG. 2

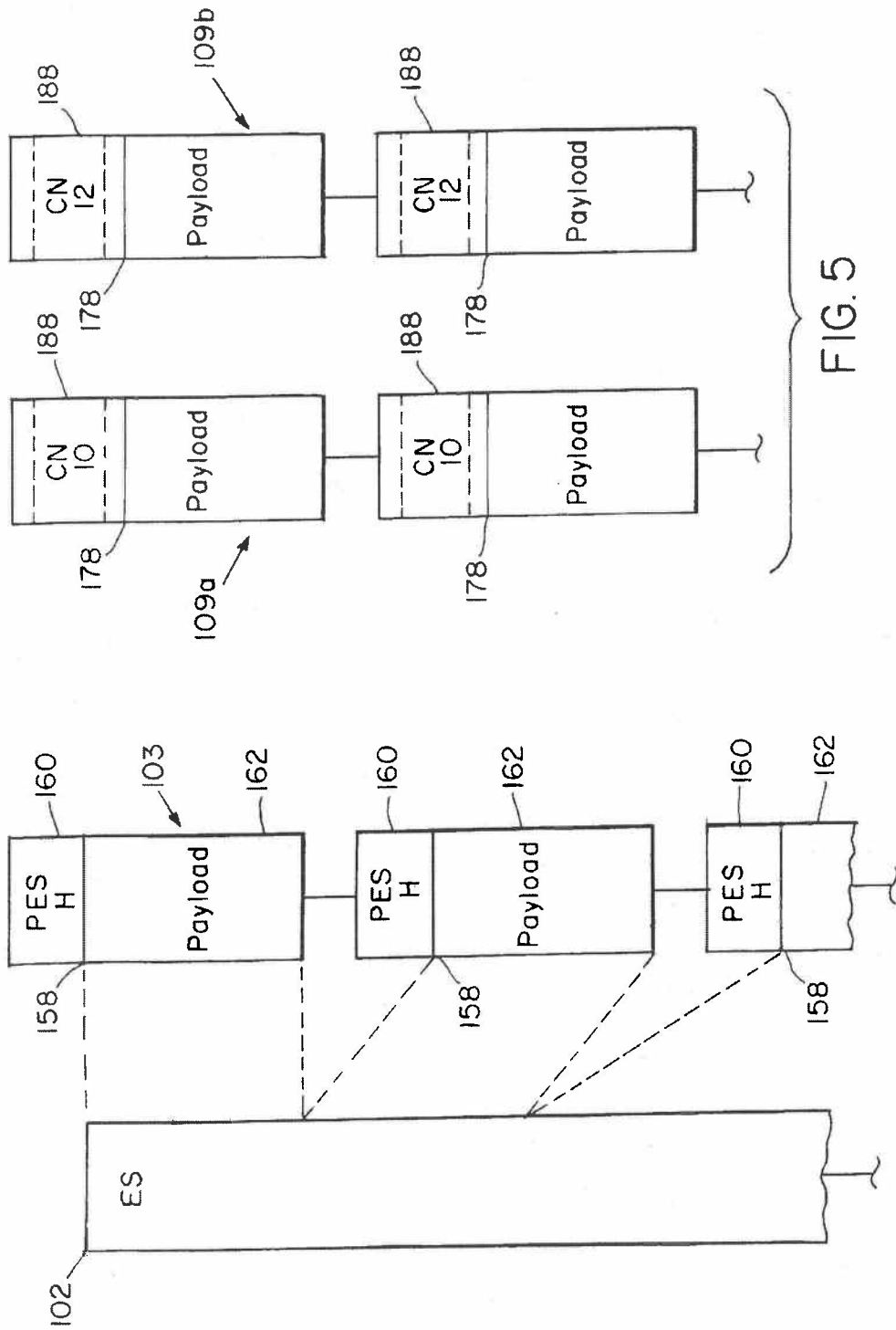


FIG. 3

FIG. 5

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