

EXHIBIT G

(12) **United States Patent**
Winger

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(54) **METHOD AND SYSTEM FOR SYMBOL BINARIZATION**

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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 7 days.

- (21) Appl. No.: **10/191,596**
- (22) Filed: **Jul. 10, 2002**

(65) **Prior Publication Data**
 US 2004/0008769 A1 Jan. 15, 2004

- (51) **Int. Cl.⁷** **H03M 7/00**
- (52) **U.S. Cl.** **341/50; 341/51**
- (58) **Field of Search** **341/50, 51, 107, 341/106**

(56) **References Cited**
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- Article—A method for the construction of Minimum-redundancy Codes by David A. Huffman, no date.
- Article—A Compression Method for Clustered Bit-Vectors—Oct. 1978.
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Primary Examiner—Brian Young
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(57) **ABSTRACT**

The present invention is directed to an improved method for the binarization of data in an MPEG data stream. The invention makes use of unary binarization to create codewords up until an index threshold. Once the threshold has been met, succeeding code symbols have appended to them an exp-Golomb suffix. This hybrid binarization scheme reduces the number of binary codewords to be processed by a Binary Arithmetic Coder (BAC), thus reducing the computation required by the BAC.

6 Claims, 4 Drawing Sheets

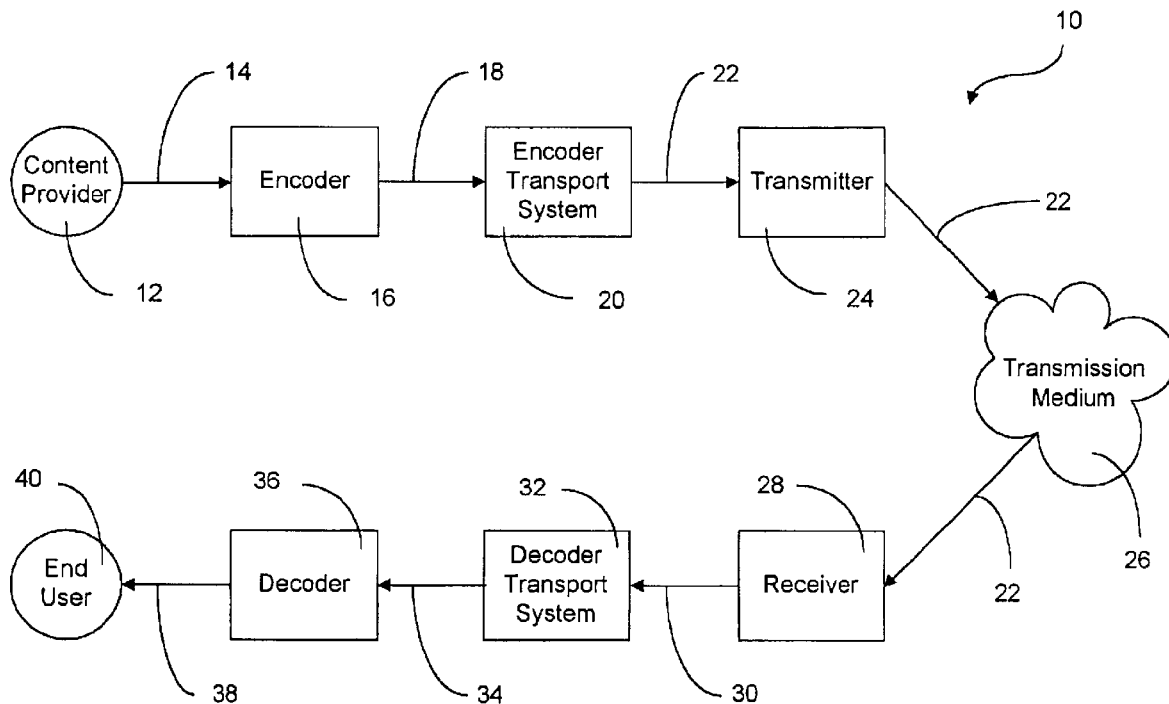


FIG. 1

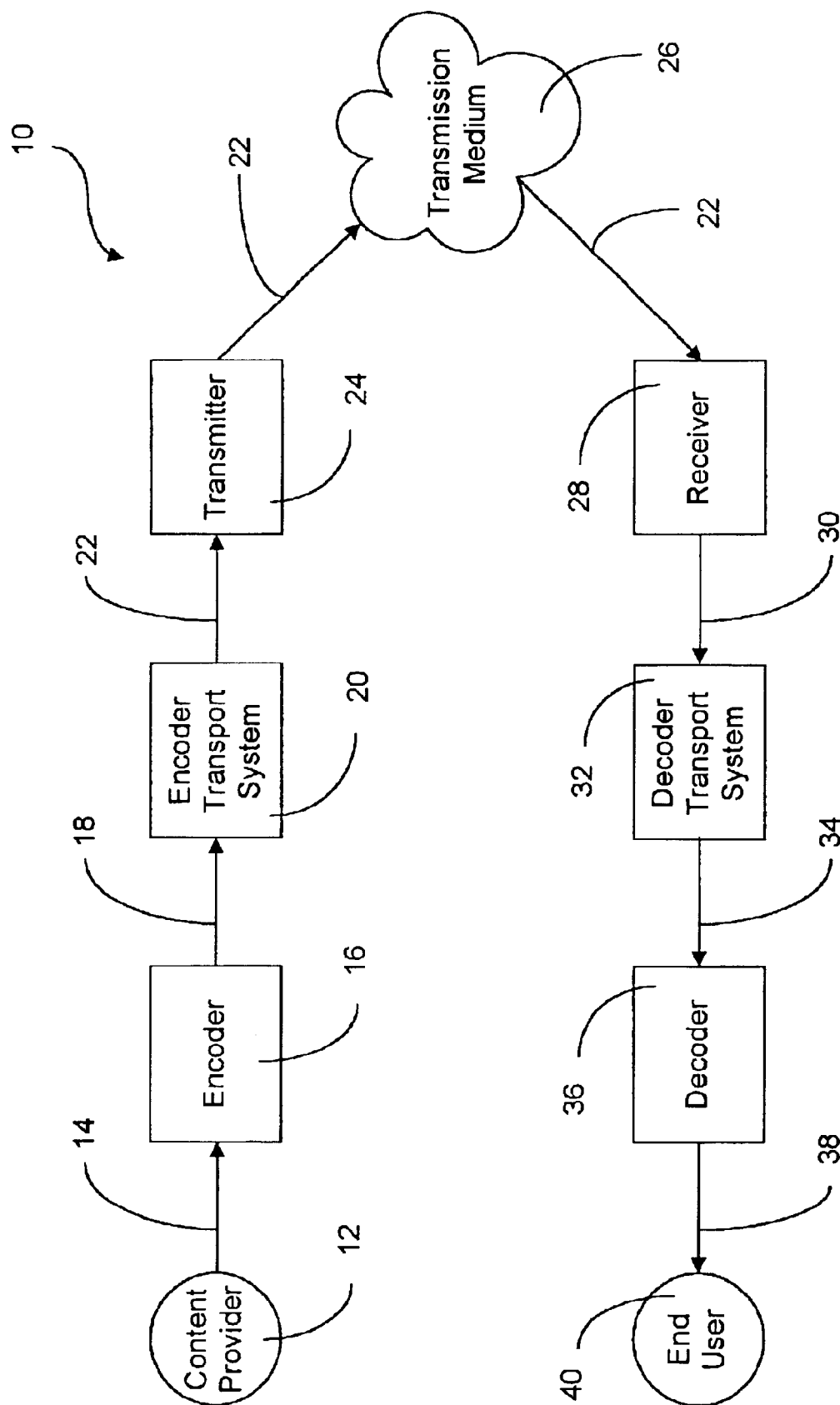


FIG. 2

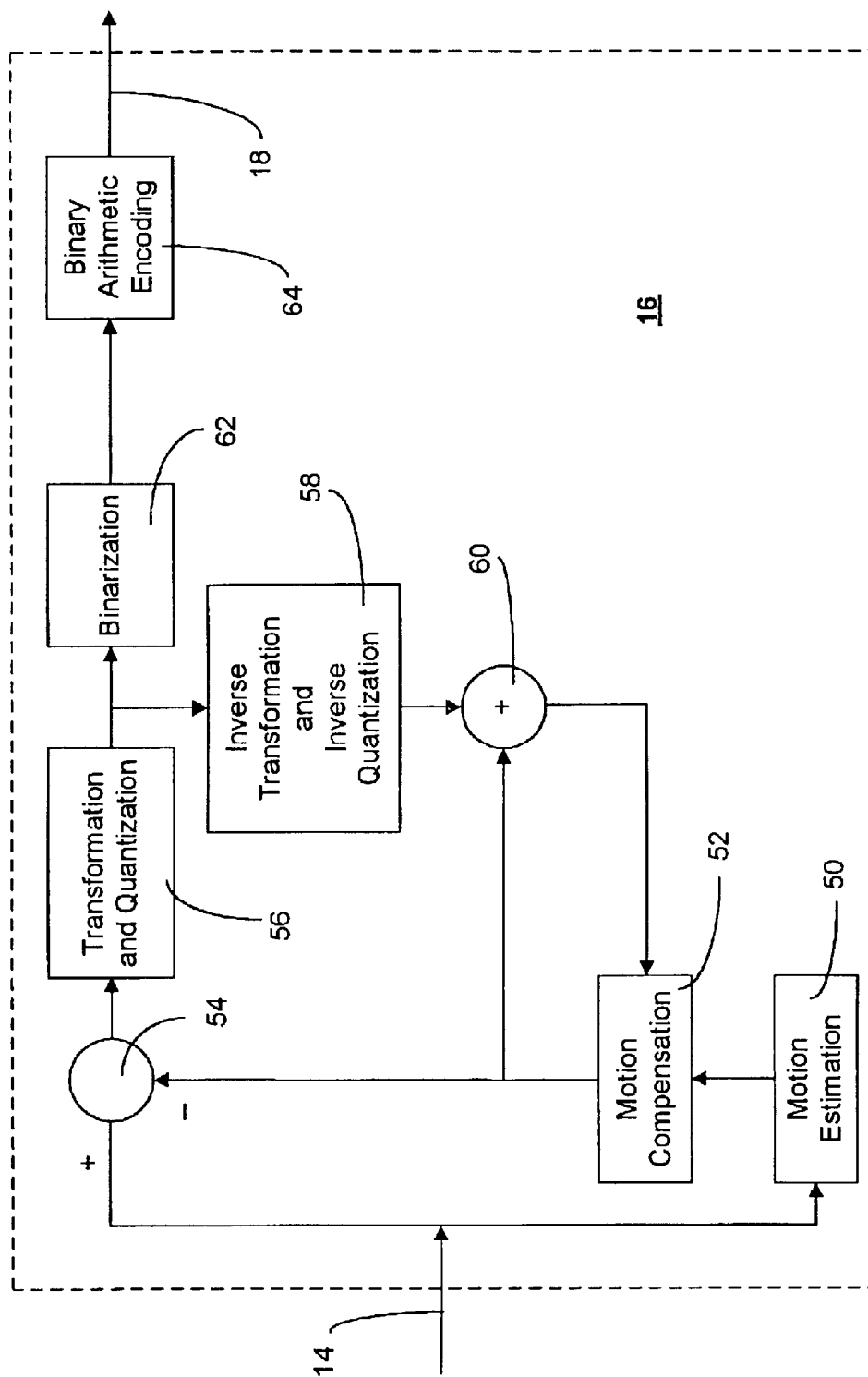
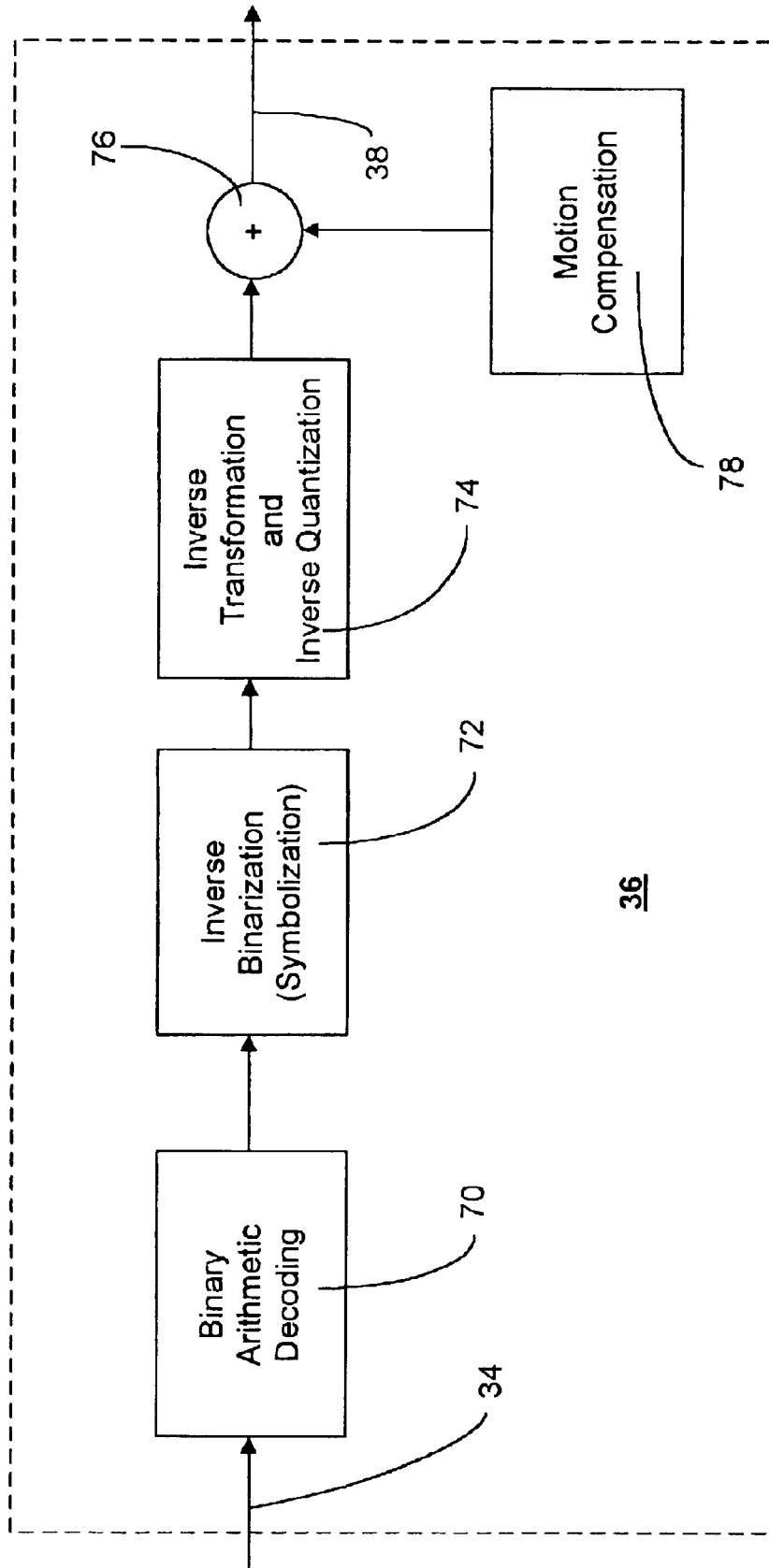


FIG. 3



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