

# EXHIBIT H

(12) **United States Patent**  
**Winger**

(10) **Patent No.:** US 6,982,663 B2  
 (45) **Date of Patent:** Jan. 3, 2006

(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.: **10/770,213**

(22) Filed: **Feb. 2, 2004**

(65) **Prior Publication Data**

US 2004/0150540 A1 Aug. 5, 2004

**Related U.S. Application Data**

(63) Continuation of application No. 10/191,596, filed on Jul. 10, 2002, now Pat. No. 6,744,387.

(51) **Int. Cl.**  
**H03M 7/00** (2006.01)

(52) **U.S. Cl.** ..... **341/107**

(58) **Field of Classification Search** ..... 341/50, 341/51, 107, 106; 704/221, 222, 201, 204, 704/503, 500, 200, 211, 236

See application file for complete search history.

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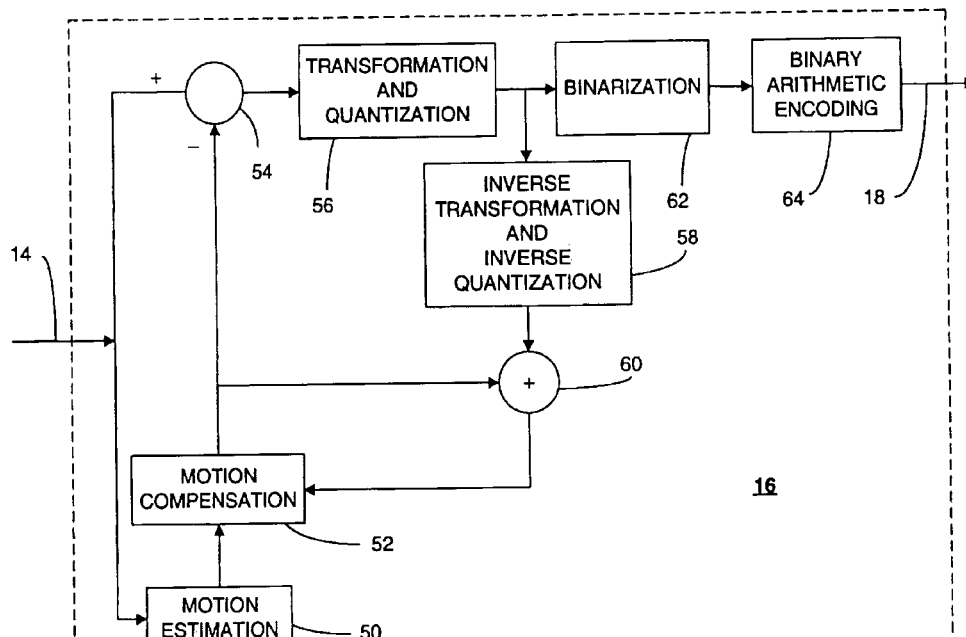
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(57) **ABSTRACT**

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 code-words 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.

**21 Claims, 6 Drawing Sheets**



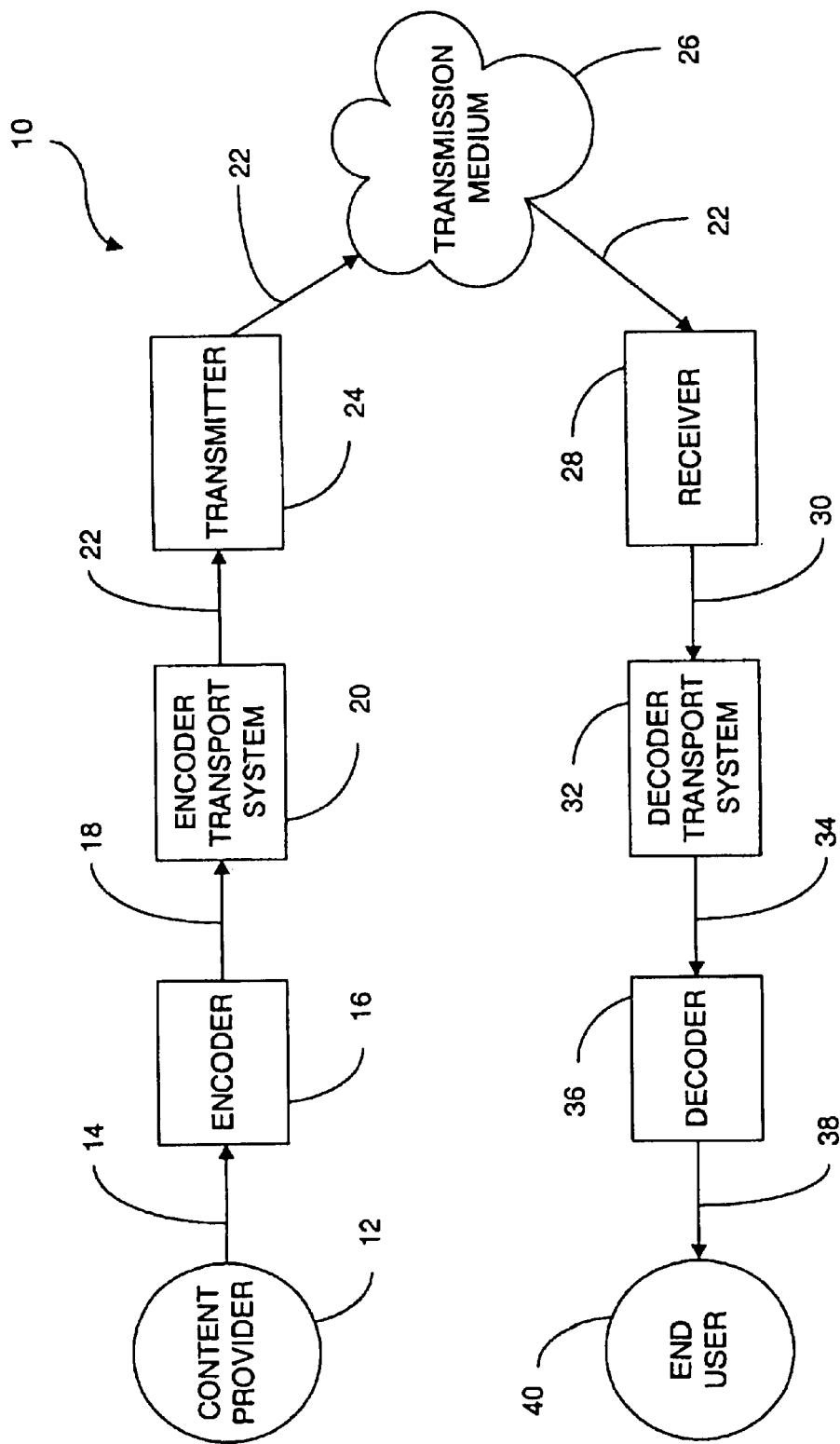


FIG. 1

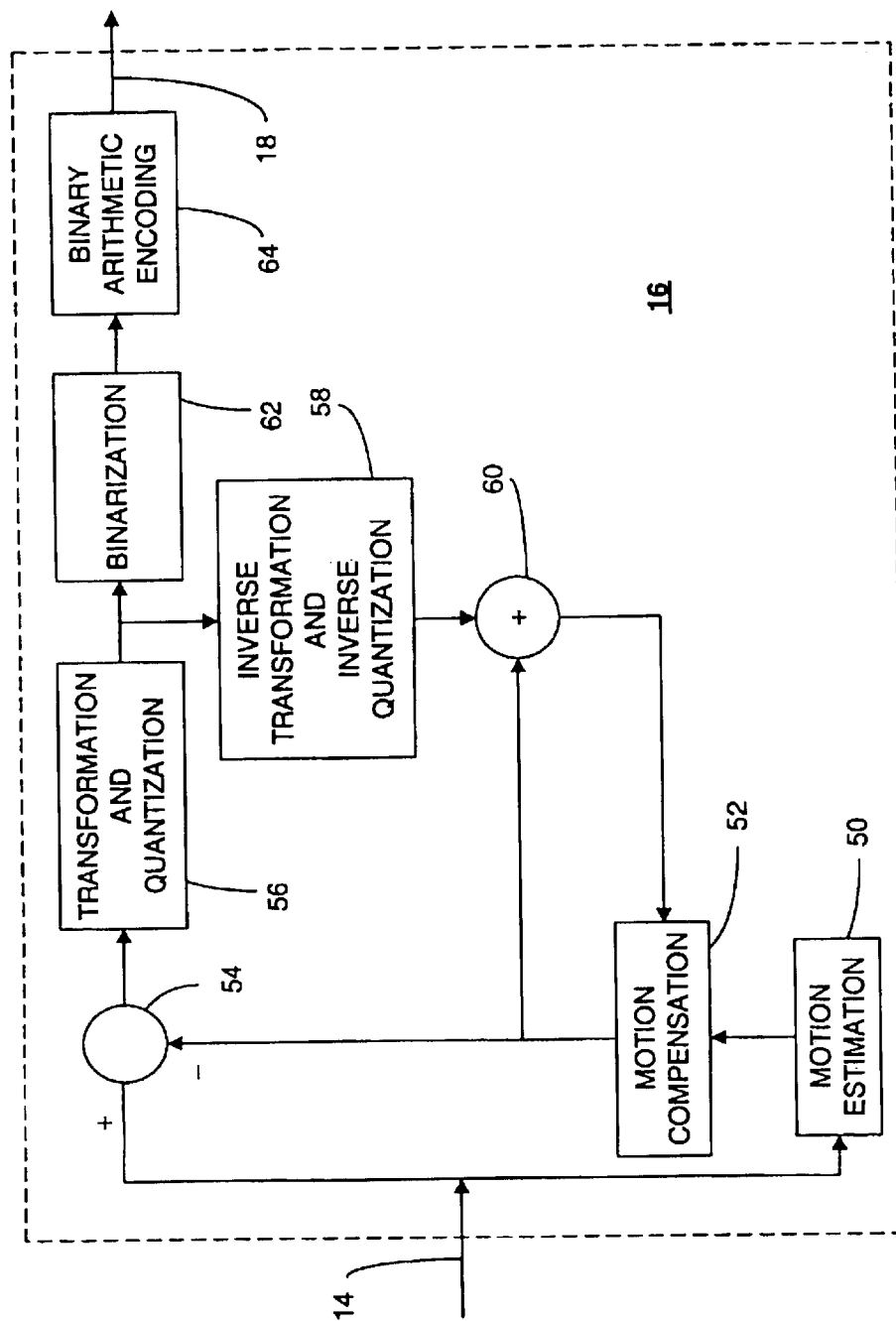


FIG. 2

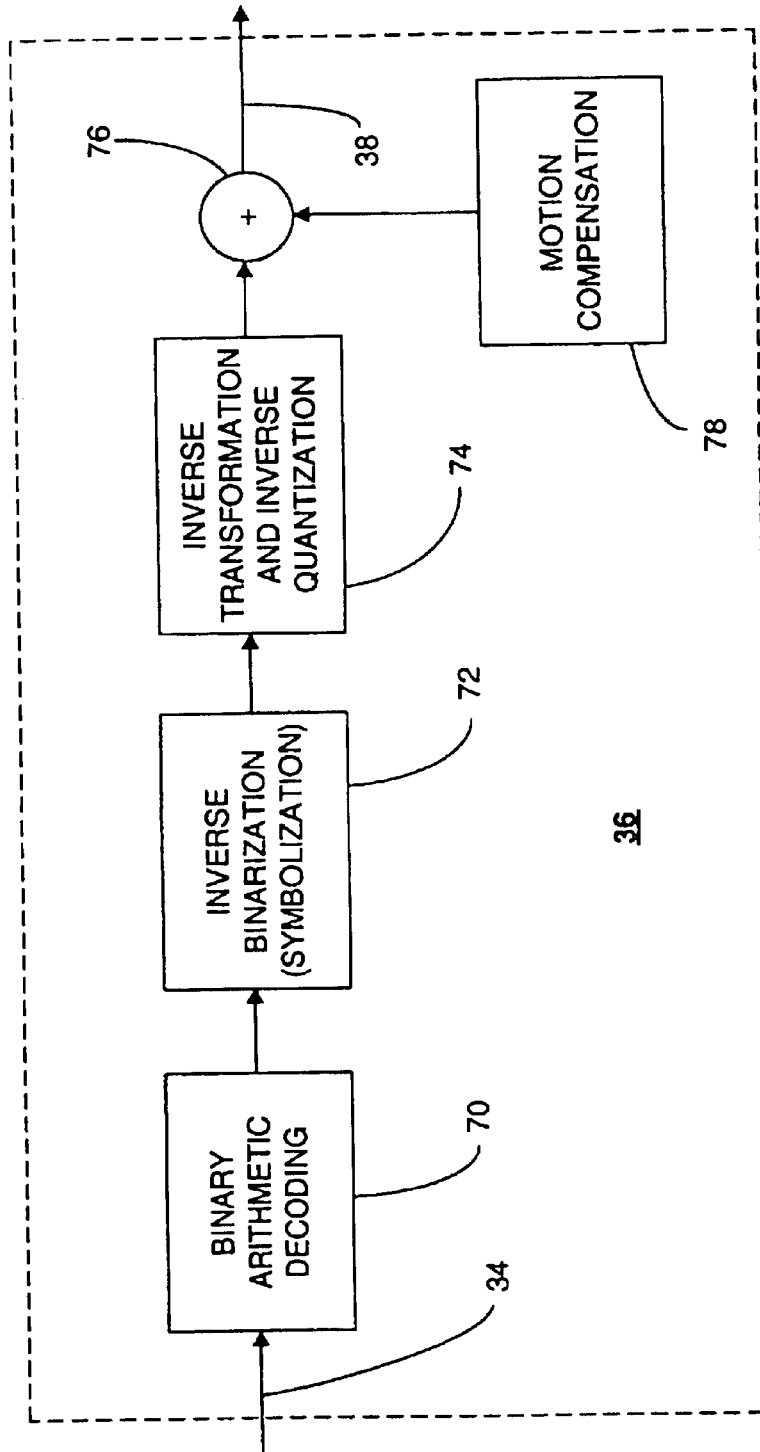


FIG. 3

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