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- (54) **CONTROL WORD AND ASSOCIATED ENTITLEMENT CONTROL MESSAGE CACHING AND REUSE**
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See application file for complete search history.

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(57) **ABSTRACT**

Methods, systems, computer-readable media, and apparatuses for providing control word and associated entitlement control message (ECM) functionalities are presented. In some embodiments, a computing device may cache concurrently a first set of control words and a first set of entitlement control messages (ECMs) associated with the first set of control words. The computing device may encrypt a transport stream with a particular control word of the first set of control words. The computing device may insert a particular ECM, of the first set of ECMs, corresponding to the particular control word into the transport stream sent to a device downstream from the computing device. In some embodiments, a computing device may reuse control words and associated ECMs.

**20 Claims, 8 Drawing Sheets**

