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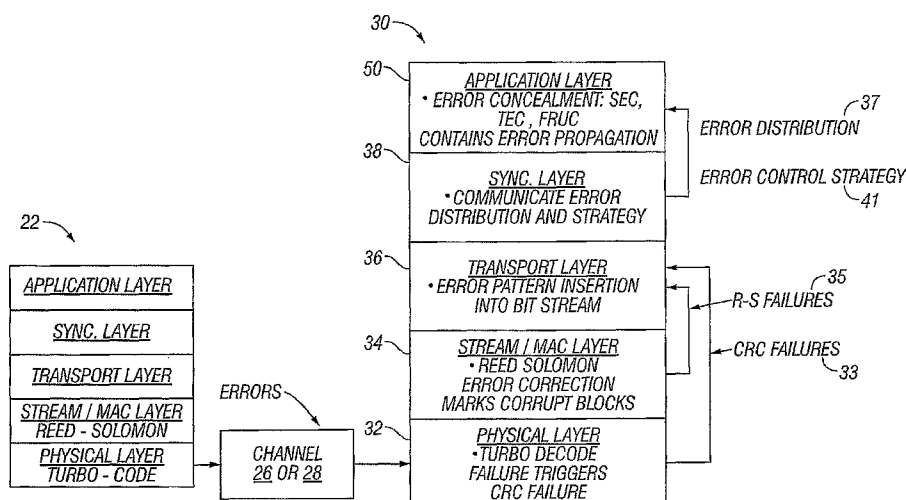
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[Continued on next page]

(54) **Title:** A DECODER ARCHITECTURE FOR OPTIMIZED ERROR MANAGEMENT IN STREAMING MULTIMEDIA



(57) **Abstract:** A method and apparatus for multi-layer integration for use in error recovery is disclosed. An error is detected in a multimedia data based on a first layer protocol and the detected error in the multimedia data is concealed based on a second layer protocol. In one aspect, the error in a multimedia data is detected based on a communication layer protocol and controlled based on a transport layer protocol. An error distribution of the controlled error is then determined based on a sync layer protocol and the detected error in the multimedia data is concealed based on an application layer protocol. In another aspect, a method and apparatus for multimedia data processing comprises error recovery as well as scalability. Finally, a method and apparatus as disclosed allows processing of multimedia stream by receiving multiple streams of encoded multimedia data, performing error recovery on an erroneous portion of a stream, and reconstructing the multimedia data from the multiple streams.

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