



**Espacenet**

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### Apparatus and method for adaptive forward error correction in data communications

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### Abstract of US5699365 (A)

An apparatus (101, 110) and method for adaptive forward error correction in a data communication system (100) provides for dynamically changing forward error correction parameters based upon communication channel conditions, such as noise levels or error rates. In the

method embodiment of the invention, data having a current degree of forward error correction is received (305), and a channel parameter is monitored (310), such as packet or bit error rates. A threshold level for the channel parameter is determined (315), and the monitored channel parameter is compared to the threshold level (320). When the channel parameter is not within a predetermined or adaptive variance of the threshold level, a revised forward error correction parameter having a greater or lesser degree of forward error correction capability is selected (330, 340, 350, 360), and the revised forward error correction parameter is transmitted (370). The device receiving the revised forward error correction parameter, such as a secondary station (110), then transmits data encoded utilizing the revised error correction parameter (425).

