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(57) Abstract :

The invention discloses a device for multi-path resistant data transfer in Wi-Fi systems, comprising an antenna array (101), adaptive channel equalizer (102), interference cancellation module (103), error correction unit (104), and control processor (106). The device ensures robust connectivity, minimizes packet loss, reduces latency, and enhances throughput by intelligently mitigating multi-path interference, making it suitable for IoT devices, routers, and real-time communication applications.

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