



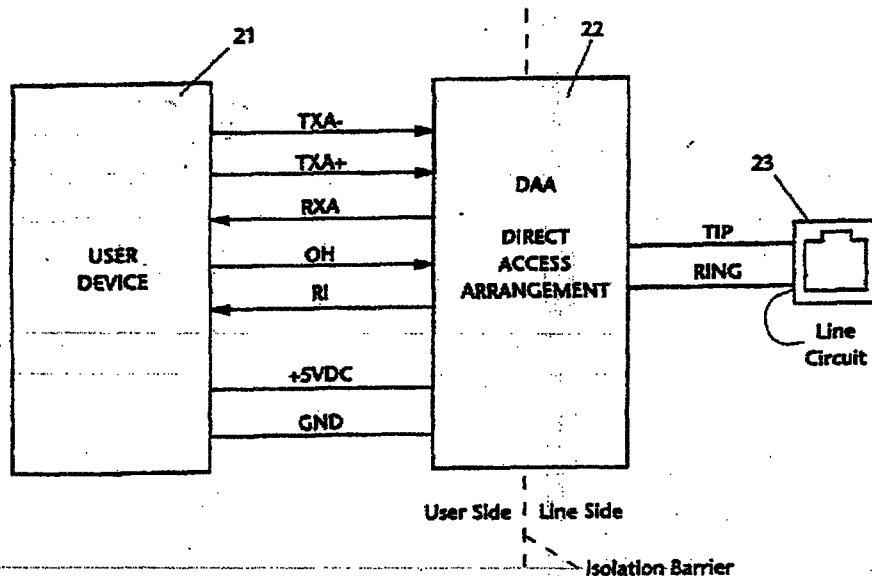
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| <p>(21) International Application Number: <b>PCT/US95/13344</b> ✓<br/>(22) International Filing Date: 20 October 1995 (20.10.95) ✓<br/>(71)(72) Applicant and Inventor: <b>YURGELITES, Gerald, J.</b><br/>[US/US]; 2133 Asilomar Drive, Antioch, CA 94509 (US).<br/>(74) Agent: <b>ZIMMERMAN, Harris</b>; Law Offices of Harris Zimmerman, Suite 710, 1330 Broadway, Oakland, CA 94612 (US).</p> |                  | <p>(81) Designated States: CN, JP, KR, SG, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).<br/><br/><b>Published</b><br/>With international search report.<br/>With amended claims.</p> |

(54) Title: **TELEPHONE ISOLATION DEVICE**



(57) Abstract

An isolation circuit for use as a telephone line interface includes at least one pair of capacitors (54, 56) that differentially couple analog transmit (TX) and receive (RX) channels in full duplex communication across an isolation barrier. The capacitors (54, 56) are connected across the isolation barrier, and each transmit or receive signal is processed to generate respective paired complementary signals. In another aspect, the invention can be configured to use two pairs of capacitors (31, 33) that differentially couple analog transmit (TX) and receive (RX) channels in a user device (21) across an isolation barrier to a line pair (23) for full duplex communication on the line pair (23).