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[54] **LAN STAR CONNECTION USING NEGATIVE IMPEDANCE FOR MATCHING**

[75] Inventors: **David E. Dodds**; **Gregory J. Erker**, both of Saskatoon, Canada

[73] Assignee: **Telecommunications Research Laboratories**, Edmonton, Canada

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[58] **Field of Search** ..... 333/124, 32, 33, 333/216, 217, 125, 127, 213; 379/394, 398, 400, 340, 399, 414, 416; 178/45, 46, 69 R, 69 C

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Primary Examiner—Paul Gensler
Attorney, Agent, or Firm—Davis and Bujold

[57] **ABSTRACT**

An impedance matched branch connection for local area networks (LANs). A stub or branch connection increases the number of computers that can connect to a LAN. A star connection is formed when several stub lines are connected at the same point. Stub connections introduce an impedance discontinuity in the line and this discontinuity causes signal reflections which interfere with normal data transmission. The impedance discontinuity is avoided by providing a negative impedance device at the star point which makes the impedance at each transmission line appear as though the stub lines were not added.

20 Claims, 2 Drawing Sheets