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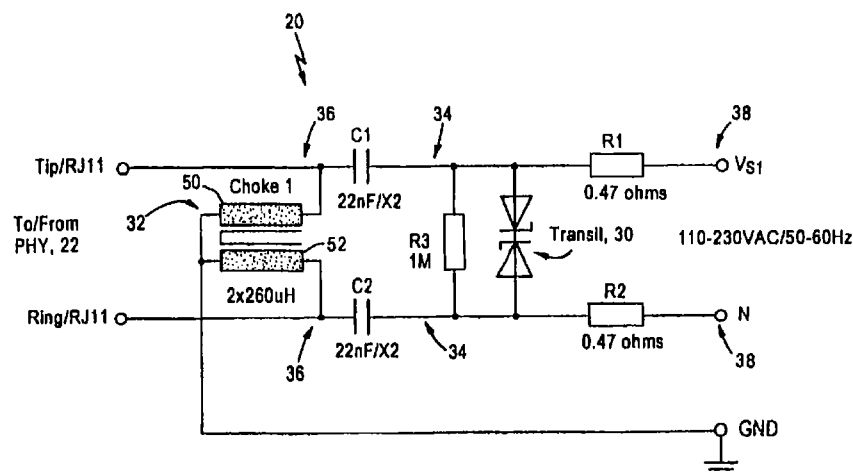
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(54) Title: POWERLINE DATA NETWORK FILTER



(57) Abstract: A power line filter connected to single-phase power lines (110-230 VAC, 50-60 Hz) enables transmission of HomePNA-type home network signals between network nodes connected to the main power lines as a network medium. The filter includes fuse resistors (R1, R2) that limit the current from the main power line, a transil diode circuit (30) that clamps the bolts to a prescribed limit, eliminating energy that may be present in main power spikes. A pair of X2-type capacitors (c1, c2) pass the 1 MHz or higher HomePNA signals, while rejecting the 50-60 Hz main power signal. A choke-type inductor (32) eliminates any residual high voltage signals in the 50-60 Hz range by short circuiting the power signals, while maintaining a high impedance at the 1 MHz range, enabling the HomePNA signals to be safely passed to the RJ-11 connector of a physical layer transceiver of the Home Network Node.

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