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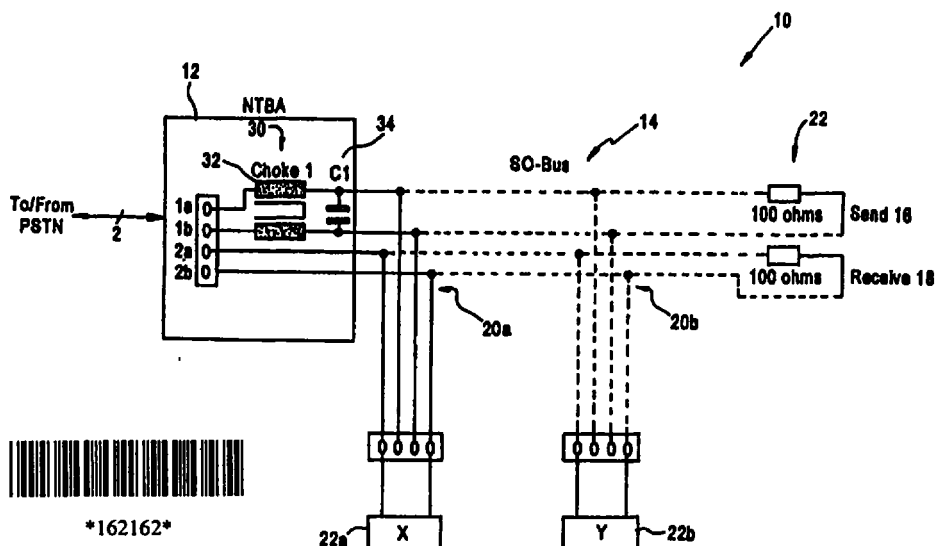
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(54) Title: APPARATUS AND METHOD OF IMPLEMENTING A HOME NETWORK BY FILTERING ISDN-BASED SIGNALS



## (57) Abstract

An arrangement for implementing a network in an ISDN-based customer premises having a 4-wire ISDN S0 bus. The ISDN-based customer premises includes a Network Termination Basic Access (NTBA) that interfaces between the residential customer premises and the public switched telephone network by mapping the 2-wire ISDN signal onto the 4-wire bus. A low pass filter is added to the 2-wire send path to eliminate high frequency noise caused by harmonic reflections of the ISDN-based signals on the 4-wire bus. The filter also provides a delay between the zero crossing of the ISDN-based signals and the transmitted network signals, minimizing the effect of the ISDN zero crossings on the home network signal.

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