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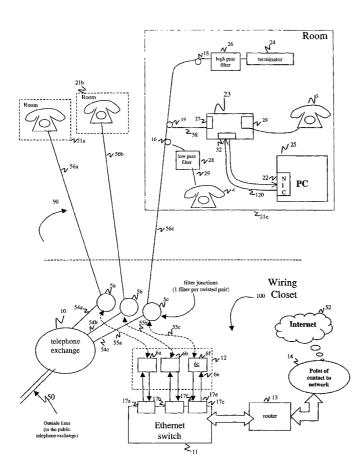
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[Continued on next page]

(54) Title: SYSTEM AND METHOD FOR 10BASET ETHERNET COMMUNICATION OVER A SINGLE TWISTED PAIR UTILIZING INTERNAL POWER SOURCES



(57) Abstract: The present invention relates generally to a system (90) and method that allows multiple computers (25), optionally separated by a distance greater than specified in the IEEE 802.3 standard, to utilize an existing wiring infrastructure to obtain a high speed connection to a network such as the Internet.

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C. DOCUMENTS CONSIDERED TO BE RELEVANT				
Category *	Citation of document, with indication, where appropriate, of the relevant passages			Relevant to claim No.
X, E	US 6,687,261 B1 (SKEBA et al.) 03 February 2004 (03.02.2004), see column 2, line 15			
^2, ~	to column 4, line 56.			
A, E	US 6,731,678 B1 (WHITE et al.) 04 May 2004 (04.05.2004), see the whole reference.			
,	2 of 6,751,676 bit (William of Mary 2004 (04.05.2004), see the whole reletence.			
A, E	US 6,738,382 B1 (WEST et al.) 18 May 2004 (18.	05.2004), see the whole reference		1
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