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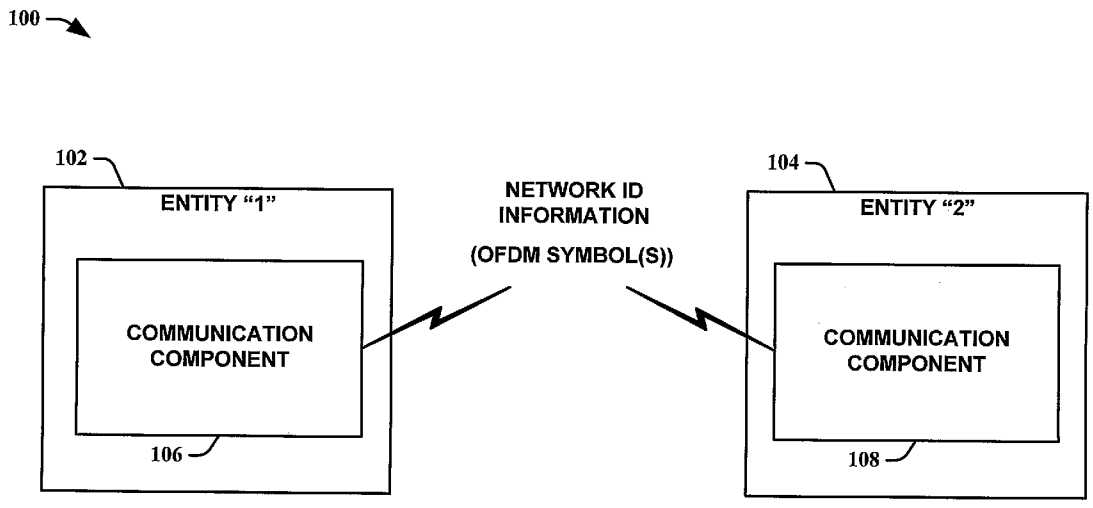
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— *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*

— *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

[Continued on next page]

(54) **Title:** WIDE AREA AND LOCAL NETWORK ID TRANSMISSION FOR COMMUNICATION SYSTEMS



(57) **Abstract:** The embodiments utilize OFDM symbols to communicate network IDs. The IDs are encoded into symbols utilizing the network IDs as seeds to scramble respective pilots that are then transmitted by utilizing the symbols. The pilots can be structured into a single OFDM symbol and/or multiple OFDM symbols. The single symbol structure for transmitting the network IDs is independent of the number of network ID bits and minimizes frequency offset and Doppler effects. The multiple symbol structure allows a much coarser timing accuracy to be employed at the expense of transmitting additional symbols. Several embodiments employ a search function to find possible network ID candidates from a transmitted symbol and a selection function to find an optimum candidate from a network ID candidate list.

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