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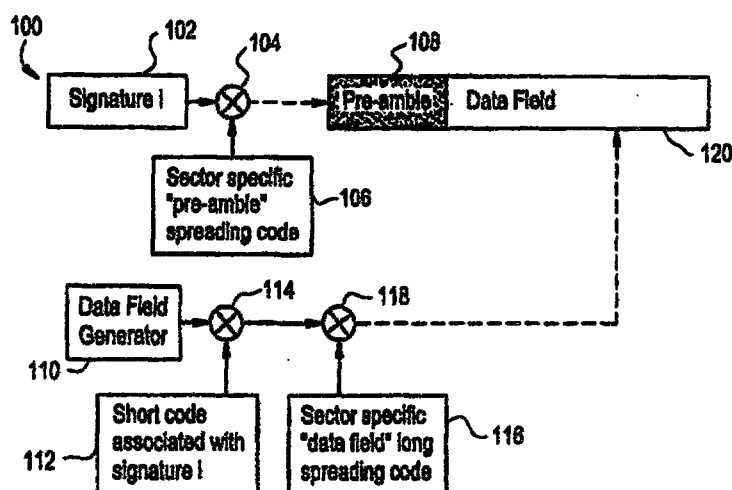
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(54) Title: **RANDOM ACCESS IN A MOBILE TELECOMMUNICATIONS SYSTEM**



(57) Abstract

A method is disclosed that assigns each sector in a cell a unique preamble spreading code (106) and a unique long-code (116) which is concatenated with a signature-associated short code (112) to spread the data in the data field (120). The period selected for the long-code (116) can be relatively long in duration (e.g., up to hours or days in length). The widths of the transmission time slots are set equal to the length of the preambles (108). Consequently, the mobile station's random access requests (20, 22, 24) can be timed to start at the beginning of the slots, and detected during the preamble periods by the matched filter in the base station's random access receiver. The data field (120) of the mobile station's random access request (20, 22, 24) is transmitted in the slots following the preamble (108) and received by the rake receiver at the base station.