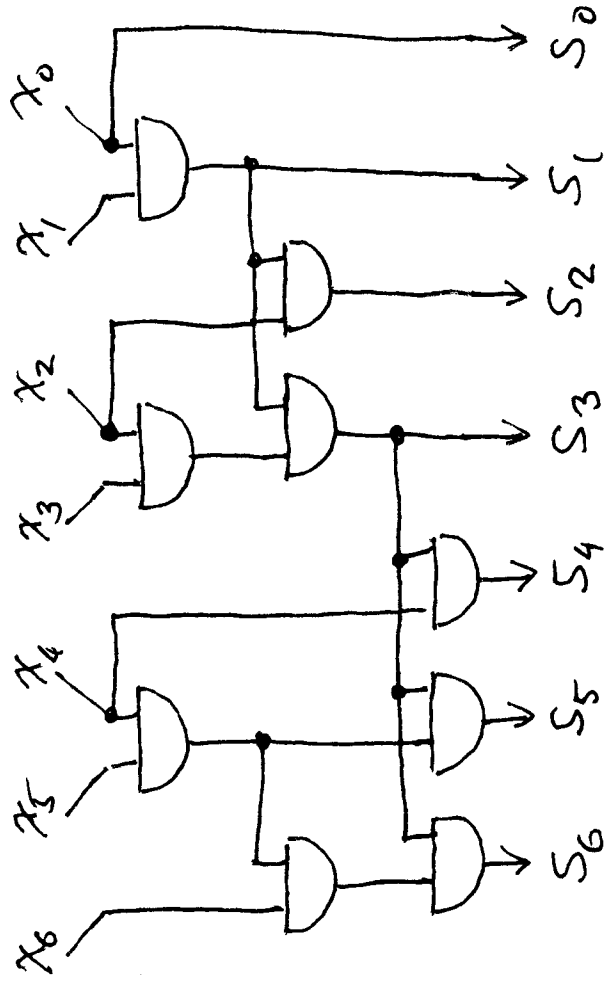


AN EFFICIENT, GENERAL DESIGN APPROACH FOR $\{S_i\}_2^k$ NET

EXAMPLE: MOD-2⁸ INCREMENTER USES $\{S_6, S_5, \dots, S_1, S_0\}$



THIS IS A PARALLEL PREFIX NETWORK

+ NUMBER OF LEVELS: $\lceil \log_2(k-1) \rceil$ FOR $k=8$, 3 LEVELS

+ ONLY 2-INPUT GATES; - FANOUT DOUBLES PER LEVEL

