

ABSTRACT
OPTICAL PROCESSING

An optical code recognition unit (OCRU) for recognising a predetermined n-bit optical code sequence coded using the Manchester code format, has an n-way splitter (7) having an input and n parallel outputs (7a). A plurality of gates (9a, 9b, 9c, 9d) are associated with the splitter outputs (7a), respective pairs of splitter outputs leading to each of the gates (9a, 9b, 9c) via a respective optical combiner (8a, 8b, 8c), and any remaining single splitter output leading directly to its gate (9d). Each of the splitter outputs (7a) is subject to a different delay of m half bit periods, where $m = 0$ to $2(n - 1)$, the values of m being chosen such that, if a predetermined optical code sequence is applied to the splitter input, the '1's in the outputs of each of the pairs of splitter outputs (7a) reach the associated AND gates (9a, 9b, 9c) and the '1' in any remaining single splitter output (7a) reaches its AND gate (9d) at predetermined times such that all the gates are turned on.

This Sheet Has Been Replaced

