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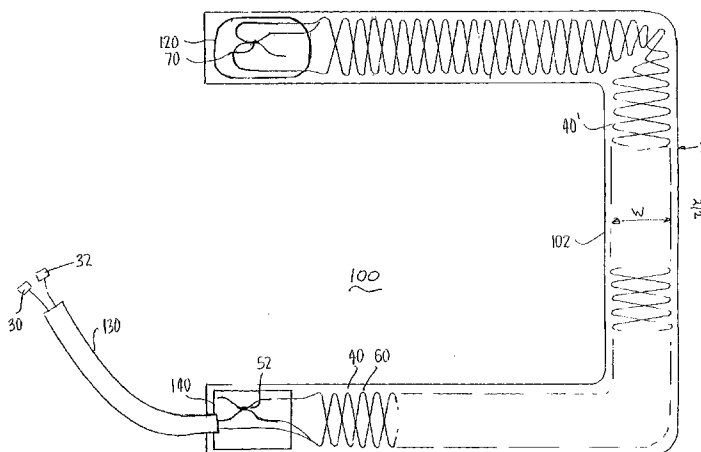
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(54) Title: PERIMETER SECURITY SYSTEM AND PERIMETER MONITORING METHOD



(57) Abstract: A perimeter security system is disclosed which includes a first cable (40) and a second cable (60) buried beneath the ground in a zig-zag pattern. The first cable (40) has a first fibre (44) and a further fibre (42). Second cable (60) has a second fibre (62). The first and second fibres (44) and (62) are connected by a coupler (52) at one end so that light can be launched into the first and second fibres (44) and (62) to propagate in one direction. The further fibre (42) is connected to a coupler (70) which also connects to the other end of the first and second fibres (44) and (62) so light can be launched into the fibres from the other end and travel in the opposite direction. Detectors (80) and (82) are provided for detecting an interference pattern produced by interference of the propagating light signals so that if a person attempts to breach the barrier by walking across the ground beneath which the cables are buried, the cables are moved to change the nature of the propagating light to in turn change the interference pattern to provide an indication of the intrusion. The location of the intrusion can also be determined by the time difference between receipt of the altered interference pattern propagating in the first direction, compared to that propagating in the opposition direction.



WO 02/071356 A1