Title (en)

BEAM WAVEGUIDE FEED FOR ANTENNA

Publication

EP 0043689 A3 19820120 (EN)

Application

EP 81302955 A 19810629

Priority

GB 8022088 A 19800704

Abstract (en)

[origin: EP0043689A2] In microwave communication systems it is common practice to use a beam waveguide to transmit energy between a waveguide (2) connected to transmitting and receiving equipment located at ground level and a main antenna reflector mounted above ground level. Hitherto the waveguide (2) has terminated in a very large, accurately machined, horn which is necessary to produce a beam having a small angle of divergence suitable for entry into the beam waveguide (6). The present invention proposes that this large (and very expensive) horn be replaced by a relatively small horn (18) which produces a beam having a relatively wide angle of divergence. By using a concave reflector (22) and a sub-reflector (21) in Cassegrain configuration this widely diverging beam is converted into a more nearly parallel (or a totally parallel) beam which enters the beam waveguide (6) as illustrated.

IPC 1-7

H01Q 19/19

IPC 8 full level

H01P 3/20 (2006.01); **H01Q 19/13** (2006.01); **H01Q 19/18** (2006.01); **H01Q 19/19** (2006.01)

CPC (source: EP)

H01Q 19/191 (2013.01)

Citation (search report)

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