

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.

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**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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