Telecoms, navigation

MULTIBEAM ANTENNA SYSTEM FOR MULTISPOT COVERAGE

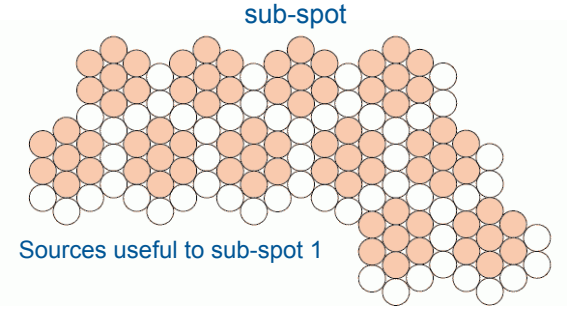
Innovative multibeam antenna system that improves the gain for transmission of multimedia content by satellite

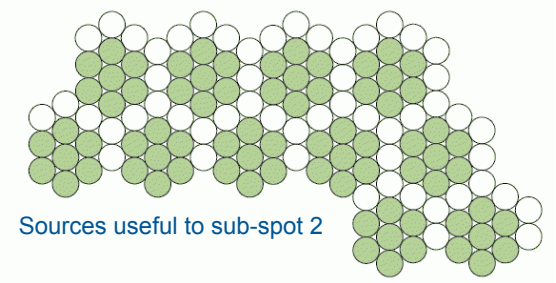
Technological benefits

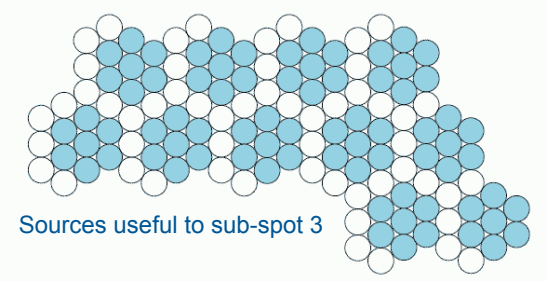
An innovative, high-performance process

Gain increase of 1 dB
Signal-to-interference ratio improved by 4 dB
20% power savings
Optimised isolation between beams

Source network depends on lit sub-spot







Invention overview

Antenna system consisting of four FAFR antennas. Each antenna produces one of the four coverages of a frequency and polarisation reuse pattern.

In each block of 12 sources used by a single beam, at a given moment the beam consists of 7 sources.

The choice of the 7 sources from among 12 is by simultaneous rotation of a one-third rotation.

Potential applications

Multimedia content broadcasting system by satellite

TRL : 2-3 (2010)

Patented invention, available under license

Commercial benefits

Optimised system

Increased satellite capacity, system can support more users
Lower cost due to decreased power requirements
No drawbacks for users

B0814

For more information

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