## High-spatial-multiplicity multi-core fibres for future dense space-division-multiplexing system - DTU Orbit (08/11/2017)

## High-spatial-multiplicity multi-core fibres for future dense space-division-multiplexing system

Design and fabrication results of high-spatial-multiplicity multi-core fibres are presented. A 30-core single-mode multi-core fibre and a 36-spatial-channels multi-core fibre with low differential mode delay have been realized with low-crosstalk characteristics through optimisation of core structure and core arrangement.

## **General information**

State: Published Organisations: Department of Photonics Engineering, High-Speed Optical Communication, Fujikura Ltd., Hokkaido University, NTT Corporation Authors: Matsuo, S. (Ekstern), Takenaga, K. (Ekstern), Saitoh, K. (Ekstern), Nakajima, K. (Ekstern), Miyamoto, Y. (Ekstern), Morioka, T. (Intern) Number of pages: 3 Pages: 1-3 Publication date: 2015

## Host publication information

Title of host publication: 2015 41st European Conference on Optical Communication (ECOC) Publisher: IEEE ISBN (Print): 9788460817413 Main Research Area: Technical/natural sciences Conference: 41st European Conference and Exhibition on Optical Communications, Valencia, Spain, 27/09/2015 -27/09/2015 optical crosstalk, optical fibres, space division multiplexing, Communication, Networking and Broadcast Technologies, Photonics and Electrooptics, 30-core single-mode multicore fibre, 36-spatial-channels multicore fibre, core arrangement, core structure optimisation, Crosstalk, Delays, dense space-division-multiplexing system, high-spatial-multiplicity multicore fibres, Indexes, Iow differential mode delay, Iow-crosstalk characteristics, Multicore processing, Optical fiber devices, Optical fiber dispersion, Periodic structures DOIs: 10.1109/ECOC.2015.7341837

Source: FindIt Source-ID: 276860181 Publication: Research - peer-review > Article in proceedings – Annual report year: 2015