

Title (en)  
SATELLITE RECEPTION AND DISTRIBUTION SYSTEM FOR USE AS A HEAD END WITH PROGRAMMABLE TRANSPONDER CONVERSION OF TRANSPONDER BLOCKS

Title (de)  
SATELLITEN-EMPFANGS- UND VERTEILANLAGE ALS KOPFSTELLE MIT PROGRAMMIERBARER TRANSPONDERUMSETZUNG VON TRANSPONDERBLÖCKEN

Title (fr)  
DISPOSITIF DE RÉCEPTION ET DE DISTRIBUTION SATELLITE SERVANT DE STATION DE TÊTE COMPORTANT UNE CONVERSION DE TRANSPONDEUR PROGRAMMABLE DE BLOCS DE TRANSPONDEURS

Publication  
**EP 2359508 A2 20110824 (DE)**

Application  
**EP 09809057 A 20091121**

Priority  
• EP 2009008309 W 20091121  
• DE 202008015500 U 20081121

Abstract (en)  
[origin: CA2744274A1] Various designs of configurable multiswitch or multifeed satellite reception systems comprising switch-over matrices and transponder branches and "one cable solutions" which allow or do not allow subsequent expansion with respect to the subscribers that can be connected thereto are known from the prior art. In general, the costs for such systems comprising frequency converters are primarily determined by the frequency converters and the associated filters. The aim of the invention is to devise inexpensive methods or devices which allow detection of the complete frequency spectrum even after subsequent expansions and which therefore do not involve any restrictions with respect to the program range. The device for the freely programmable conversion of 1 to m transponders in n transponder blocks (TB1 to TBn) of a satellite reception system comprises the following elements: a satellite antenna (S) comprising at least one LNB reception converter (LNB1, LBN4) to the outputs of which the respective satellite IF plane is applied; a multiswitch (MS) connected to the outputs of the one or more LNB reception converters (LNB1, LNB4); n converters (U) which are arranged in parallel to each other; and a combinatorial circuit (VS) connected to the converters (U) to combine the n transponder blocks (TB1 to TBn) to an output spectrum, the device making all configured transponders available to every receiver in the manner of a satellite head end. The invention is used in the field of satellite reception and distribution systems as a head end.

IPC 8 full level  
**H04H 20/63** (2008.01); **H04H 40/90** (2008.01)

CPC (source: EP US)  
**H04H 20/63** (2013.01 - EP US); **H04H 40/90** (2013.01 - EP US)

Citation (search report)  
See references of WO 2010057664A2

Citation (examination)  
• US 5073930 A 19911217 - GREEN JAMES A [US], et al  
• US 7130576 B1 20061031 - GURANTZ ITZHAK [US], et al

Citation (third parties)  
Third party :  
• RF5218 Satellite Channel Stacking Switch (CSS) May 2008 (Entropic).  
• SAT-ZF Converter GU991, Manual FEB 1999 (GESA Elektronik GmbH)  
• PLOOF M. ET AL: "Channel stacking switch technology for residential DBS reduces cabling and STBs.", EE TIMES INDIA, 16 November 2007 (2007-11-16), pages 1 - 5, XP008151179

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)  
**DE 202008015500 U1 20090212**; CA 2744274 A1 20100527; CA 2744274 C 20150929; EP 2359508 A2 20110824; US 2011296470 A1 20111201; US 8656436 B2 20140218; WO 2010057664 A2 20100527; WO 2010057664 A3 20100715

DOCDB simple family (application)  
**DE 202008015500 U 20081121**; CA 2744274 A 20091121; EP 09809057 A 20091121; EP 2009008309 W 20091121; US 200913130167 A 20091121