

**INTERNATIONAL SEARCH REPORT**

International application No.  
PCT/RU 2019/050189

A. CLASSIFICATION OF SUBJECT MATTER		<b>H01P 5/18 (2006.01)</b>	
According to International Patent Classification (IPC) or to both national classification and IPC			
B. FIELDS SEARCHED			
Minimum documentation searched (classification system followed by classification symbols)			
H01P 5/00, 5/12, 5/16, 5/18, H01P 3/00, 3/02, 3/08			
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched			
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)			
PatSearch (RUPTO internal), USPTO, PAJ, Esp@cenet, DWPI, EAPATIS, PATENTSCOPE, Information Retrieval System of FIPS			
C. DOCUMENTS CONSIDERED TO BE RELEVANT			
Category*	Citation of document, with indication, where appropriate, of the relevant passages		Relevant to claim No.
A, D	Sener Uysal et al. NOVEL MICROSTRIP MULTIFUNCTION DIRECTIONAL COUPLERS AND FILTERS FOR MICROWAVE AND MILLIMETER-WAVE APPLICATIONS. IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES MTT-39(6):977 - 985 -JULY 1991, c. 983, fig. 12, 13		1
A, D	US 5373266 A1 (THE UNITED STATES OF AMERICA AS REPRESENTED BY THE SECRETARY OF THE ARMY) 13.12.1994		1
A	RU 2042990 C1 (KAZANSKY AVIATIONSONNY INSTITUT IM.A.N.TUPOLEVA) 27.08.1995		1
A	RU 156062 U1 (ZAKRYTOE AKTSIONERNOE OBSHCHESTVO "NAUCHNO-PROIZVODSTVENNAIA FIRMA "MIKRAN") 27.10.2015		1
A	RU 2601233 C1 (AKTSIONERNOE OBSHCHESTVO "FEDERALNY NAUCHNO-PROIZVODSTVENNY TSENTR "NIZHEGORODSKY NAUCHNO-ISSLEDOVATELSKY INSTITUT RADIOTEKHNIKI") 27.10.2016		1
<input type="checkbox"/> Further documents are listed in the continuation of Box C.		<input type="checkbox"/> See patent family annex.	
* Special categories of cited documents:		"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention	
"A" document defining the general state of the art which is not considered to be of particular relevance		"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone	
"E" earlier application or patent but published on or after the international filing date		"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art	
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)		"&" document member of the same patent family	
"O" document referring to an oral disclosure, use, exhibition or other means			
"P" document published prior to the international filing date but later than the priority date claimed			
Date of the actual completion of the international search		Date of mailing of the international search report	
24 January 2020 (24.01.2020)		30 January 2020 (30.01.2020)	
Name and mailing address of the ISA/ RU		Authorized officer	
Facsimile No.		Telephone No.	