(11) **EP 2 779 182 A3**

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3: 29.11.2017 Bulletin 2017/48

(43) Date of publication A2: 17.09.2014 Bulletin 2014/38

(21) Application number: 14160000.7

(22) Date of filing: 14.03.2014

(51) Int Cl.: H01F 17/04 (2006.01) H01F 27/28 (2006.01)

H01F 27/30 (2006.01) H01F 27/29 (2006.01)

(84) Designated Contracting States:

AL 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 RS SE SI SK SM TR Designated Extension States:

BA ME

(30) Priority: 14.03.2013 US 201313804857 29.03.2013 CN 201310109345

13.02.2014 CN 201410050474

(71) Applicant: Sumida Corporation Tokyo 103-8589 (JP)

(72) Inventors:

 Sakamoto, Shinichi NATORI-CITY, MIYAGI, 981-1226 (JP)

 Cheng, Zhigang NATORI-CITY, MIYAGI, 981-1226 (JP)

 Mock, Fernando Chan NATORI-CITY, MIYAGI, 981-1226 (JP)

 Kawarai, Mitsugu NATORI-CITY, MIYAGI, 981-1226 (JP)

 (74) Representative: Delumeau, François Guy et al Cabinet Beau de Loménie
 158, rue de l'Université
 75340 Paris Cedex 07 (FR)

(54) Electronic component and method for manufacturing electronic component

(57) An electronic component includes a magnetic core member (1), a winding (2) and a magnetic exterior body (3). The magnetic core member has a flat base and a core. The flat base has a top surface, a bottom surface, a first side surface and a second side surface opposite to the first side surface. The core is located on the top surface of the flat base. A winding has an edgewise coil and two non-wound flat wires that extend from the edgewise coil. A magnetic exterior body covers at least the core and the edgewise coil. The two non-wound flat wires continuously extend along the top surface, the first side surface, the bottom surface and the second side surface of the flat base in this order. The two non-wound flat wires located on the bottom surface work as electrodes.

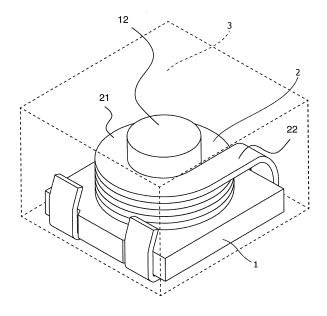


Fig. 1

EP 2 779 182 A3



EUROPEAN SEARCH REPORT

Application Number EP 14 16 0000

	DOCUMENTS CONSIDE				
Category	Citation of document with inc of relevant passa		Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)	
X Y	JP 2002 289442 A (M0 4 October 2002 (2002 * abstract; figures	2-10-04)	1-3,6, 8-10 4,5	INV. H01F17/04 H01F27/30 H01F27/28 H01F27/29	
X Y	JP 2001 060523 A (CC KK) 6 March 2001 (20 * abstract; figures	DNCORDE DENSHI KOGYO 001-03-06) 2,4,5 *	1-3,6, 8-10 4,5		
Х	US 2008/036566 A1 (I AL) 14 February 2008 * abstract * * paragraph [0052] - figures 8-13 *	,	11-16		
Х	US 2003/218527 A1 (0	OKAMOTO TOSHINORI [JP])	1-3,6-10		
Υ	27 November 2003 (20 * abstract * * paragraph [0038] figures 3,4 *	,	4,5		
Υ	EP 1 818 954 A1 (TAIYO YUDEN KK [JP])		4,5	TECHNICAL FIELDS SEARCHED (IPC)	
	15 August 2007 (2007 * paragraph [0017] figures 1,3,4,7 * * abstract *			H01F	
Α	US 2007/216512 A1 (SANO KAN [JP] ET AL) 20 September 2007 (2007-09-20) * abstract; figure 1 *		1-16		
Α	JP 2003 243228 A (TDK CORP) 29 August 2003 (2003-08-29) * abstract; figure 1 *		1-16		
	The present search report has b	een drawn up for all claims Date of completion of the search		Examiner	
Munich		13 October 2017	War	rneck, Nicolas	
CATEGORY OF CITED DOCUMENTS X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category A: technological background O: non-written disclosure P: intermediate document		T : theory or principle E : earlier patent doc after the filing date P : document cited ir L : document cited for	T: theory or principle underlying the invention E: earlier patent document, but published on, or after the filing date D: document cited in the application L: document cited for other reasons 8: member of the same patent family, corresponding document		

EP 2 779 182 A3

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 14 16 0000

5

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

13-10-2017

10	Patent document cited in search report	Publication date	Patent family member(s)	Publication date
	JP 2002289442 A	04-10-2002	NONE	
15	JP 2001060523 A	06-03-2001	NONE	
20	US 2008036566 A	1 14-02-2008	CN 101553891 A CN 103151139 A TW 200826122 A US 2008036566 A1 US 2011005064 A1 US 2016196914 A1 WO 2008021958 A2	07-10-2009 12-06-2013 16-06-2008 14-02-2008 13-01-2011 07-07-2016 21-02-2008
25	US 2003218527 A	1 27-11-2003	JP 2003347129 A US 2003218527 A1	05-12-2003 27-11-2003
30	EP 1818954 A	1 15-08-2007	AT 479997 T CN 101034619 A EP 1818954 A1 JP 4777100 B2 JP 2007214521 A KR 20070080831 A TW 200746191 A US 2007188281 A1	15-09-2010 12-09-2007 15-08-2007 21-09-2011 23-08-2007 13-08-2007 16-12-2007 16-08-2007
35	US 2007216512 A	1 20-09-2007	CN 101038815 A JP 4783183 B2 JP 2007250864 A KR 20070094446 A TW 200737235 A US 2007216512 A1	19-09-2007 28-09-2011 27-09-2007 20-09-2007 01-10-2007 20-09-2007
40	JP 2003243228 A	29-08-2003	NONE	
45				
50				
55	DO NAME OF THE PROPERTY OF THE			

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82