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(54) **ANTENNA COIL**

(57) In an antenna coil which includes a core member having an X-axis leg section protruding in the X-axis direction from an intersection of the core member and having a Y-axis leg section protruding in the Y-axis direction from the intersection, X-axis winding wires wound around the outer periphery of the X-axis leg section, and Y-axis winding wires wound around the outer periphery of the Y-axis leg section, at least one of an X-axis winding frame section for the X-axis winding wire, the X-axis winding frame section being provided at the X-axis leg section, and a Y-axis winding frame section for the Y-axis winding wire, the Y-axis winding frame section being provided at the Y-axis leg section, has one of intermediate flange sections for respectively separating the X-axis winding frame section and the Y-axis winding frame section into a pair of winding frame sections and a pair of winding frame sections, the winding frame sections of each of the pairs corresponding to different winding shapes.

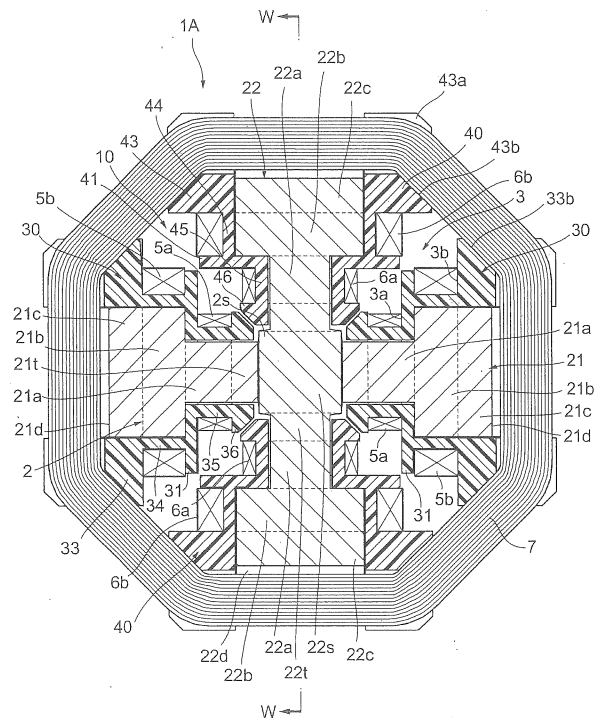


Fig.1



EUROPEAN SEARCH REPORT

Application Number
EP 15 18 0569

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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Y	* paragraphs [0019], [0022], [0023], [0027], [0029] *	3,5,8-10,12,14-18	H01F3/10 H01F5/00 H01Q7/06 H01F5/02
X	EP 1 376 762 A1 (TOKAI RIKA CO LTD [JP]) 2 January 2004 (2004-01-02)	1,2,4,7,11,13	H01F17/04 H01F27/30
Y	* paragraphs [0022], [0026] - [0028] * * column 11, lines 14-34 *	3,5,8-10,12,14-18	G07C9/00 H01Q1/32 H01Q7/00 H01Q21/24
Y	EP 2 093 833 A1 (SUMIDA CORP [JP]) 26 August 2009 (2009-08-26)	3,5,8-10,14-18	
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-The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 17 November 2015	Examiner Gols, Jan
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 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 & : member of the same patent family, corresponding document			

EPO FORM 1503 03.82 (P04C01)

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CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing claims for which payment was due.

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Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due and for those claims for which claims fees have been paid, namely claim(s):

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No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due.

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LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

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see sheet B

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All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.

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As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.

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Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:

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None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:

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1-18

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The present supplementary European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims (Rule 164 (1) EPC).



**LACK OF UNITY OF INVENTION
SHEET B**

Application Number
EP 15 18 0569

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The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

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1. claims: 1-18

An antenna coil, wherein at least on of the X-axis winding frame section and the Y-axis winding frame section comprises an intermediate flange section for separating the winding frame section into at least two winding frame sections for different winding shapes.

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2. claims: 19-23

A method of manufacturing an antenna coil.

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

EP 15 18 0569

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
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17-11-2015

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