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Yoshioka et al.

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(45) **Date of Patent: Aug. 19, 2025**

(54) **INDUCTOR COMPONENT**

(71) Applicant: **Murata Manufacturing Co., Ltd.**, Kyoto-fu (JP)

(72) Inventors: **Yoshimasa Yoshioka**, Nagaokakyo (JP); **Katsufumi Sasaki**, Nagaokakyo (JP)

(73) Assignee: **Murata Manufacturing Co., Ltd.**, Kyoto-fu (JP)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 1031 days.

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Aug. 26, 2020 (JP) 2020-142763

(51) **Int. Cl.**
H01F 27/28 (2006.01)
H01F 27/24 (2006.01)
(Continued)

(52) **U.S. Cl.**
CPC ***H01F 27/29*** (2013.01); ***H01F 27/24*** (2013.01); ***H01F 27/2804*** (2013.01); *B33Y 80/00* (2014.12); *H01F 41/041* (2013.01)

(58) **Field of Classification Search**
CPC H01F 27/24; H01F 27/28; H01F 27/306; H01F 2027/065; H01F 27/2852; H01F 27/34; H02M 3/003; H02M 1/327; H02M 1/0064; H02M 1/40; H02M 3/1584; H02M 1/00
(Continued)

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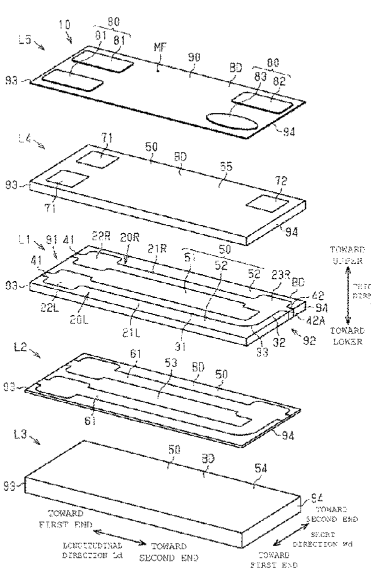
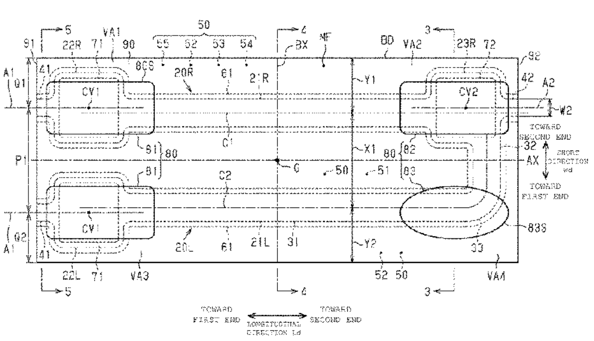
Primary Examiner — Shawki S Ismail
Assistant Examiner — Kazi S Hossain
(74) *Attorney, Agent, or Firm* — Studebaker Brackett PLLC

(57) **ABSTRACT**

The main face of an element body of an inductor component has a two-fold symmetrical shape with respect to the geometric center of the main face. First and second inductor wires extend inside the element body. Four terminal portions, each having a terminal portion exposed from the main face, are in the element body, two of the which are first external terminals, one a second external terminal, and one a dummy portion which is a specific dummy portion. The main face is divided into four congruent imaginary regions with one terminal portion in each. The terminal portion in the first imaginary region, that is an imaginary region at a two-fold symmetrical position around the geometric center with respect to the fourth imaginary region having the specific dummy portion, is a specific terminal portion. The shapes of the specific dummy and terminal portions are different from each other.

20 Claims, 11 Drawing Sheets





(51) **Int. Cl.**
H01F 27/29 (2006.01)
B33Y 80/00 (2015.01)
H01F 41/04 (2006.01)

(58) **Field of Classification Search**
USPC 336/221, 83, 170, 232
See application file for complete search history.

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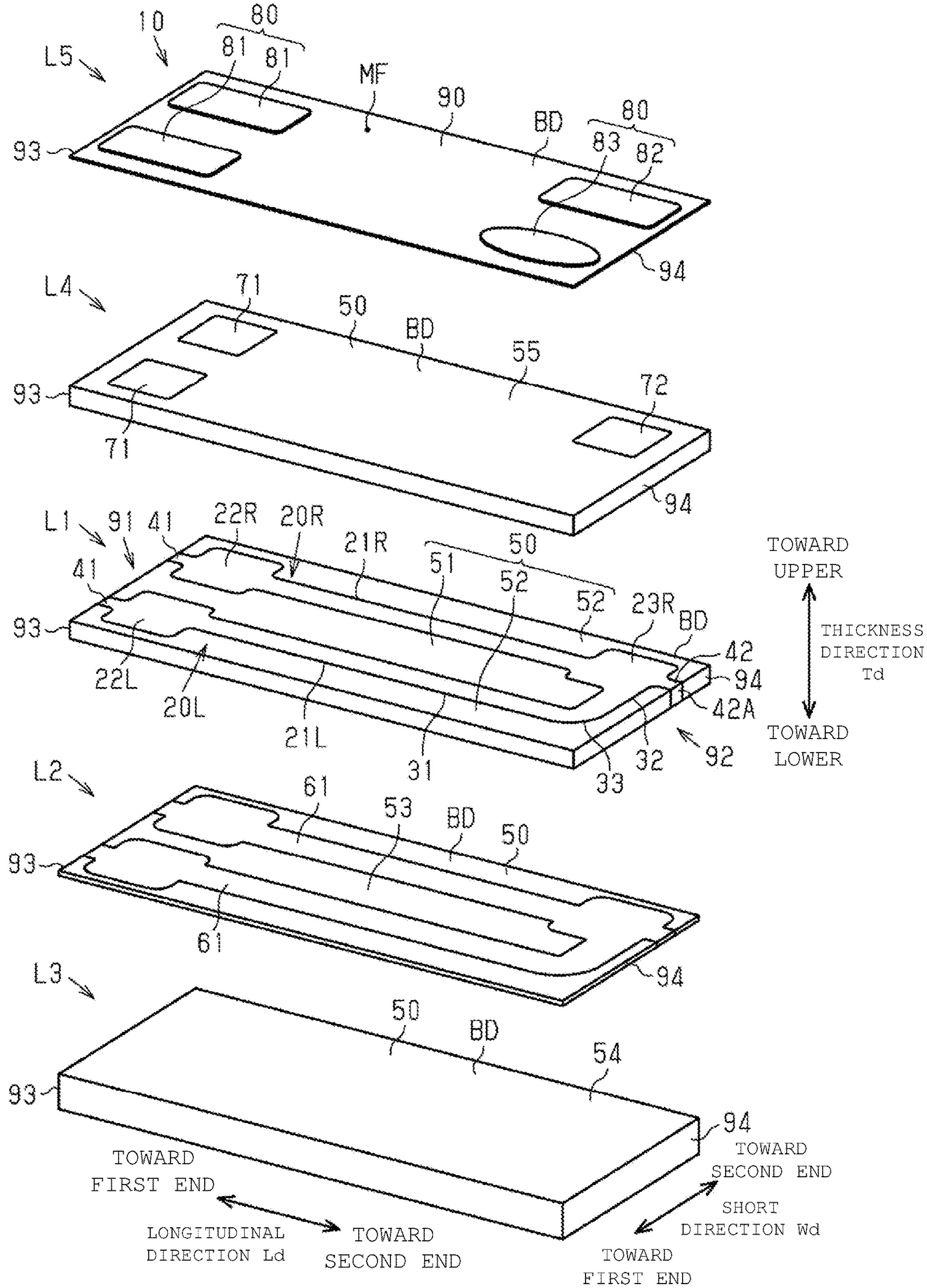
FIG. 1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80
81
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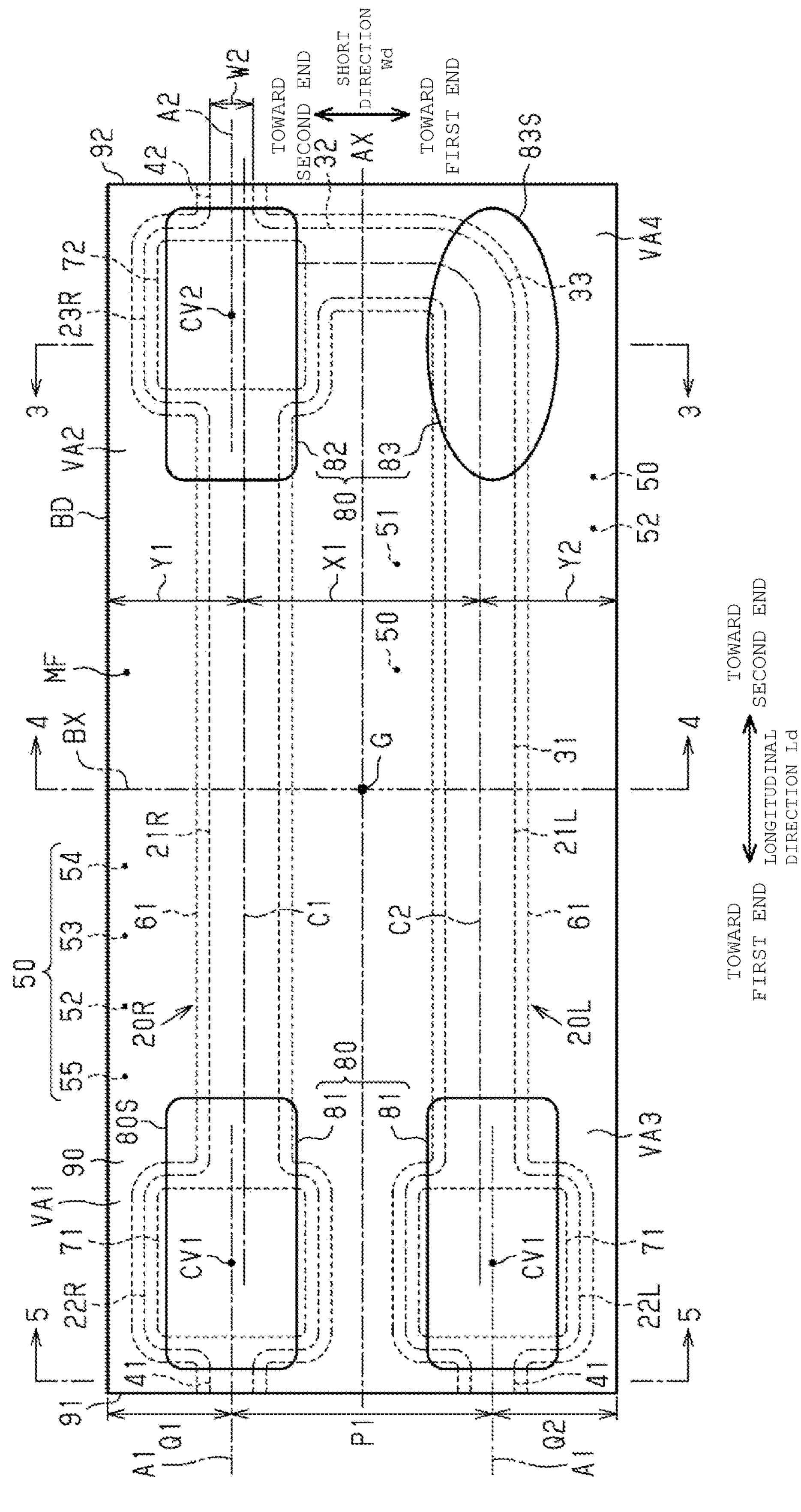
L5
MF
90
BD
80
83
82
93
94
L4
71
50
BD
55
72
93
71
94
L1
91
41
22R
20R
21R
50
51
52
41
52
23R
BD
42
94
42A
93
22L
20L
21L
31
33
32
92
TOWARD UPPER
THICKNESS DIRECTION Td
TOWARD LOWER
L2
61
53
BD
50
93
61
94
L3
50
BD
54
93
94
TOWARD SECOND END
TOWARD FIRST END
LONGITUDINAL DIRECTION Ld
TOWARD SECOND END
SHORT DIRECTION Wd
TOWARD FIRST END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W2
A2
AX
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42
32
83S
VA4
33
23R
72
CV2
3
3
VA2
82
80
83
BD
50
52
51
Y1
X1
Y2
MF
50
4
4
BX
G
31
21R
21L
54
53
61
C1
C2
61
50
52
20R
20L
55
80
81
81
80S
90
VA3
VA1
71
71
CV1
CV1
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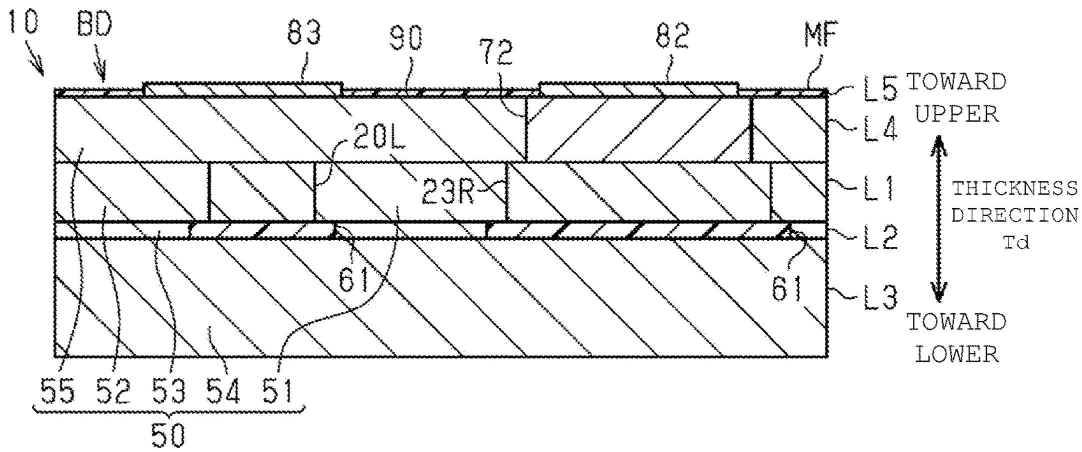
22R
22L
41
41
91
Q1
P1
Q2
A1
A1

FIG. 2

FIG. 3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L4
20L
23R
L1
L2
61
61
L3
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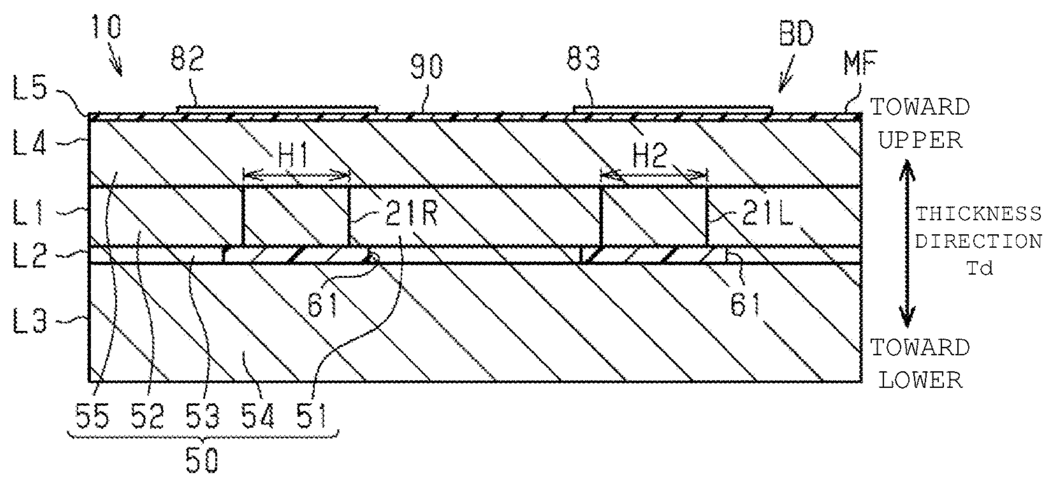
THICKNESS DIRECTION Td
TOWARD LOWER
55 52 53 54 51
50

FIG. 4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82
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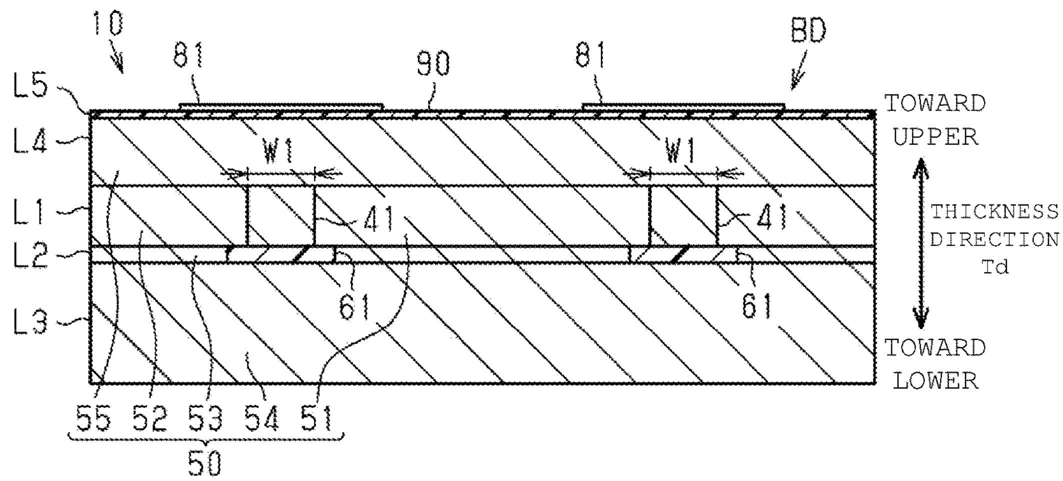
83
BD
MF
L5
L4
L1
L2
L3
H1
H2
21R
21L
61
61
TOWARD UPPER
THICKNESS DIRECTION Td
TOWARD LOWER
55 52 53 54 51
50

FIG. 5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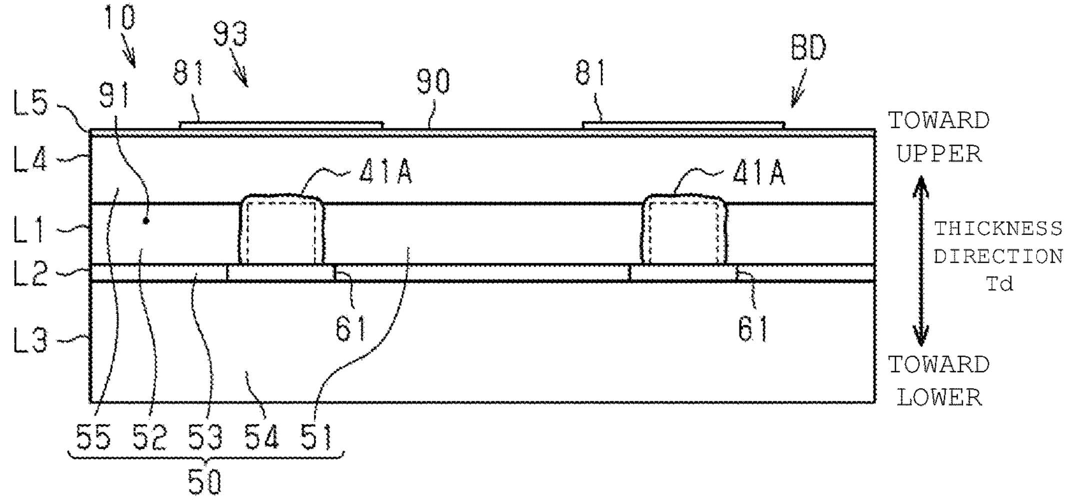
81
90
81
BD
L5
L4
L1
L2
L3
W1
W1
41
41
61
61
TOWARD UPPER
THICKNESS DIRECTION Td
TOWARD LOWER
55 52 53 54 51
50

FIG. 6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91
L5
L4
L1
L2
L3
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THICKNESS DIRECTION Td
TOWARD LOWER
55 52 53 54 51
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FIG. 7

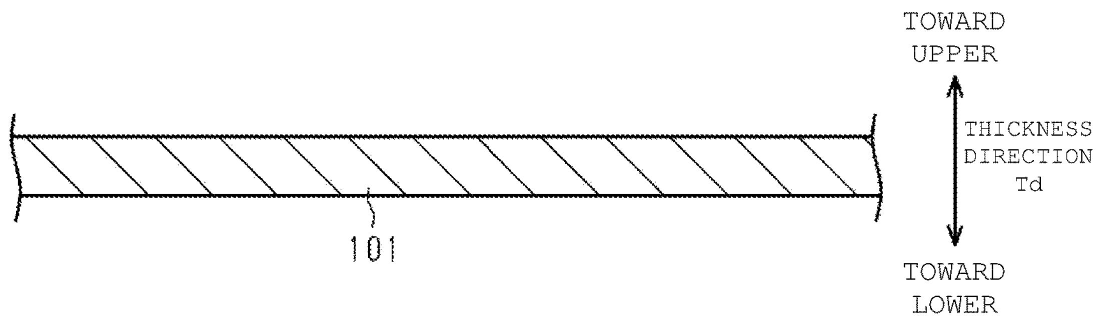


FIG. 8

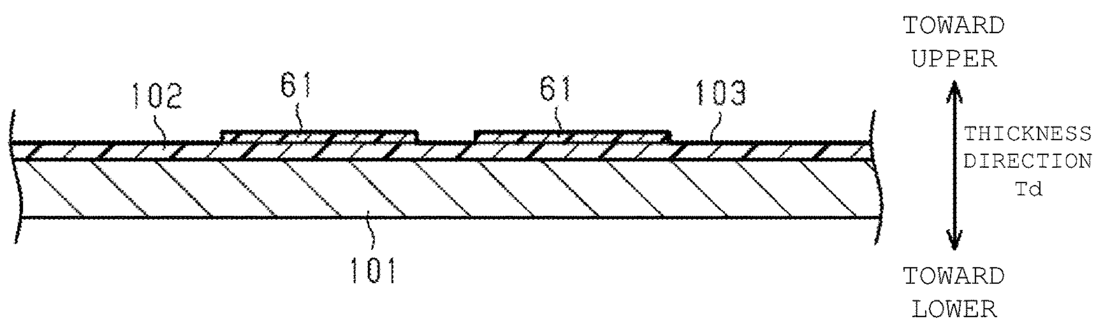


FIG. 9

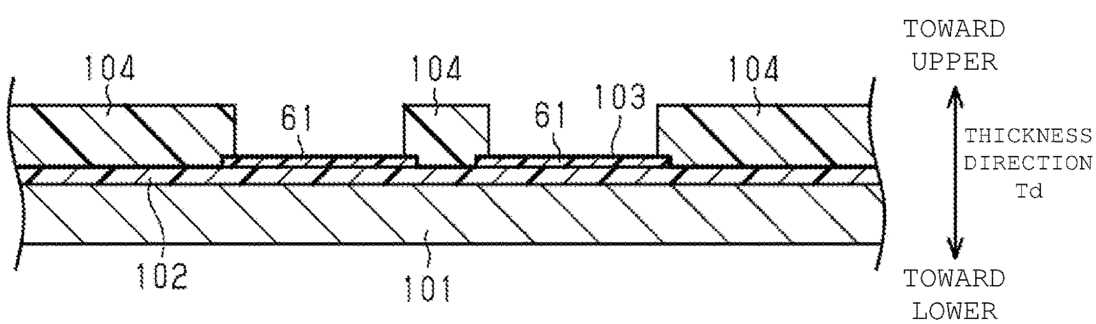


FIG. 10

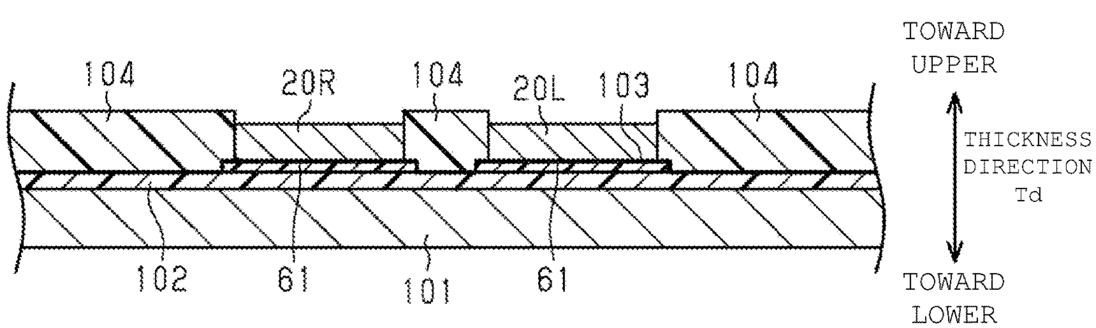


FIG. 11

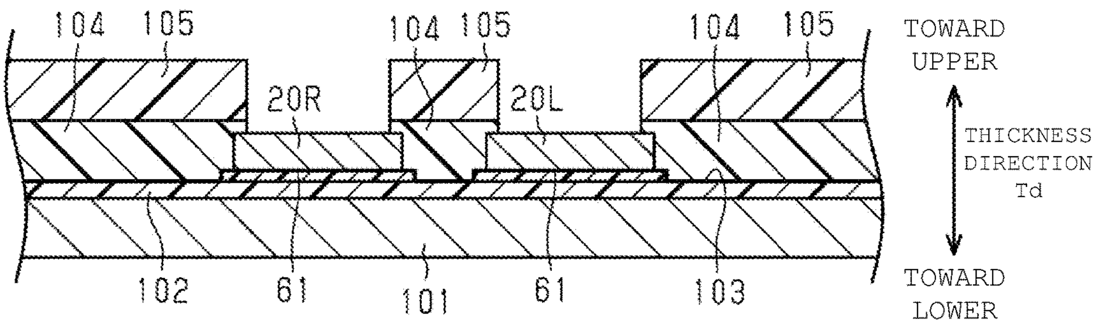


FIG. 12

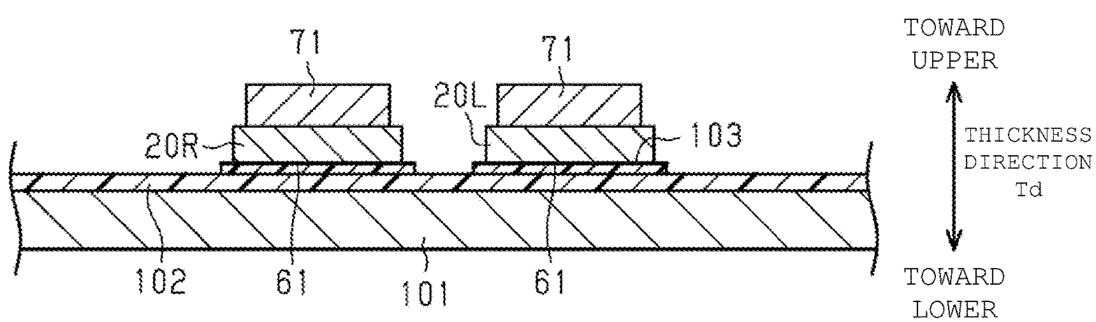


FIG. 13

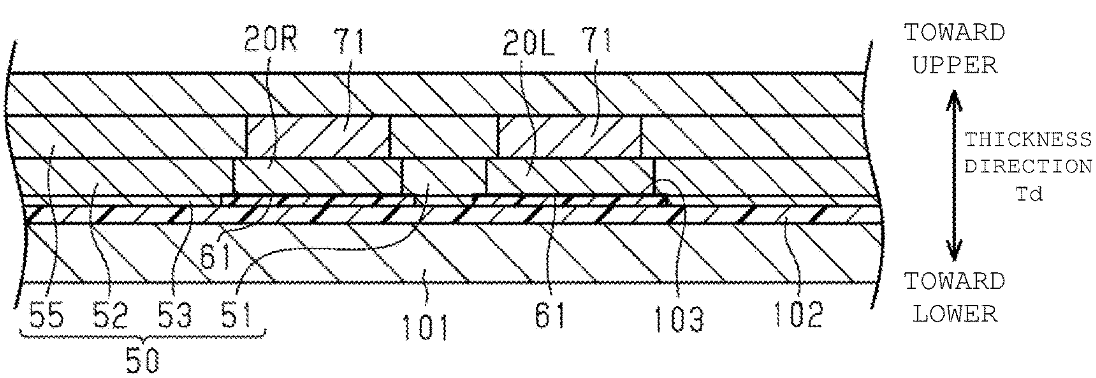
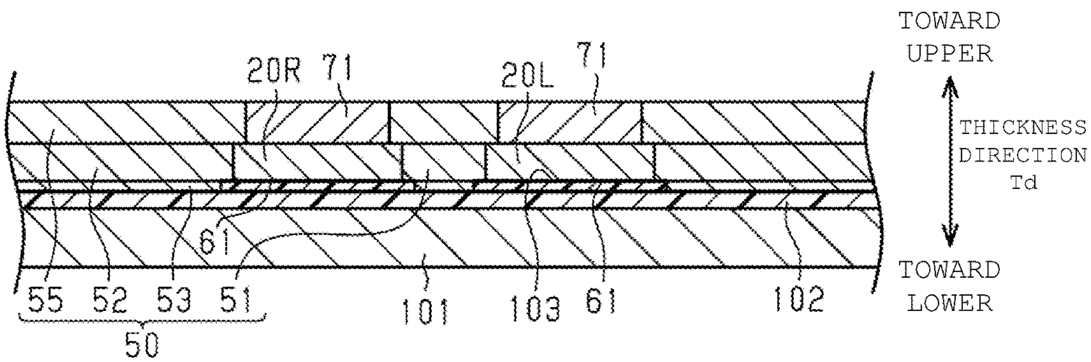


FIG. 14



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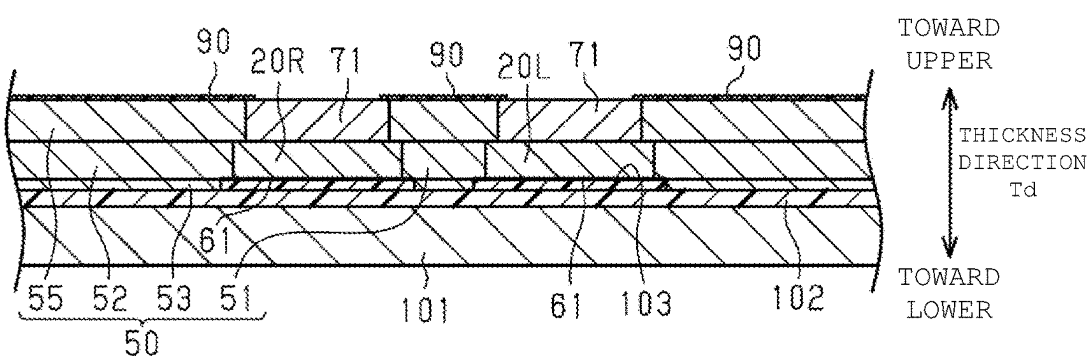
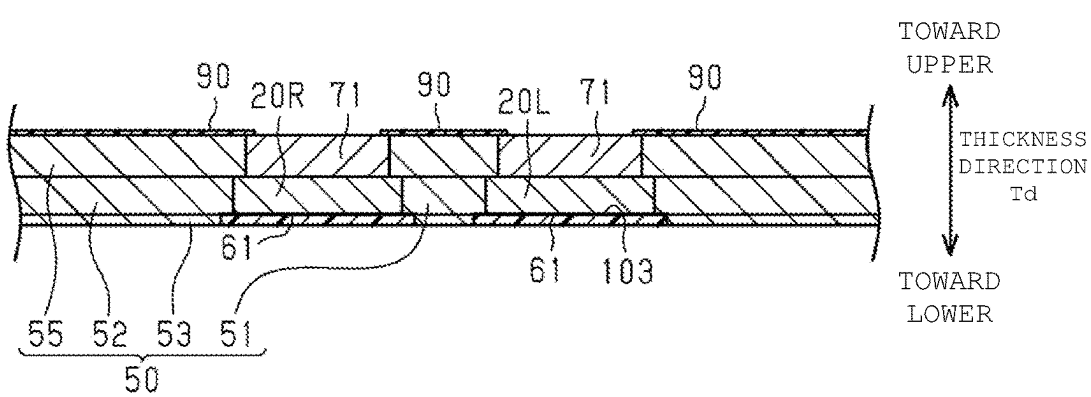


FIG. 16



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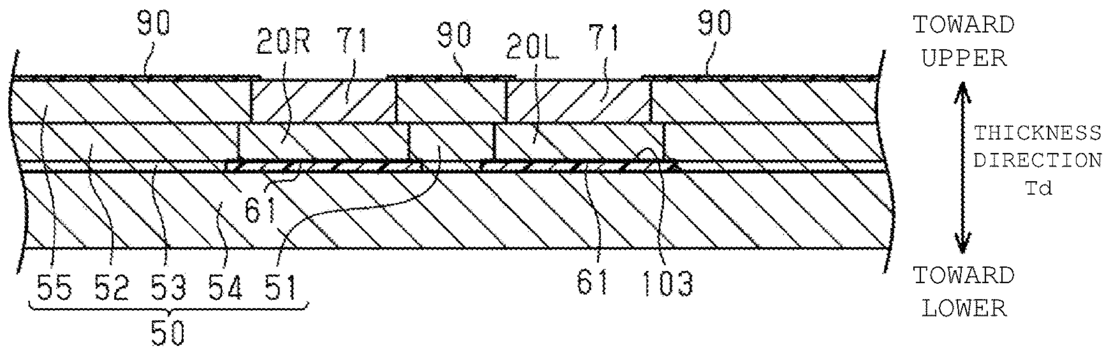
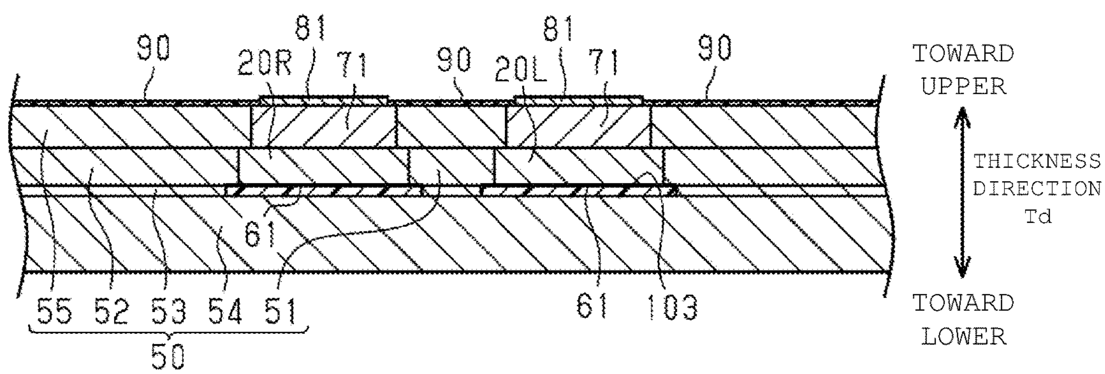


FIG. 18



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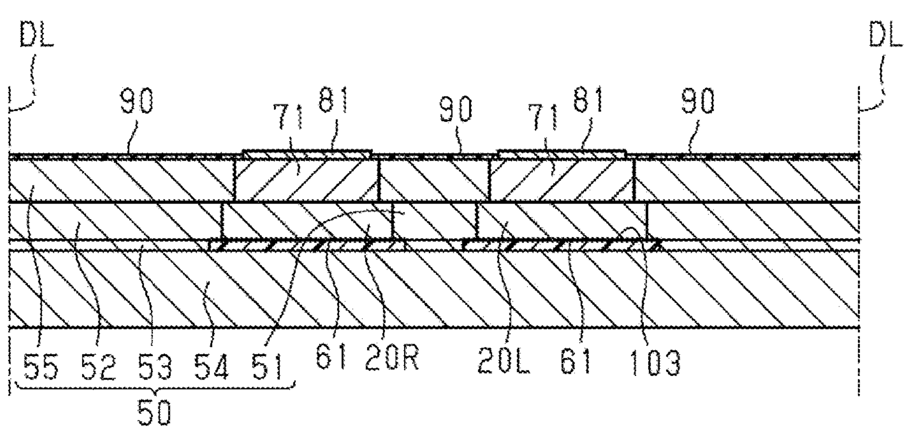


FIG. 20

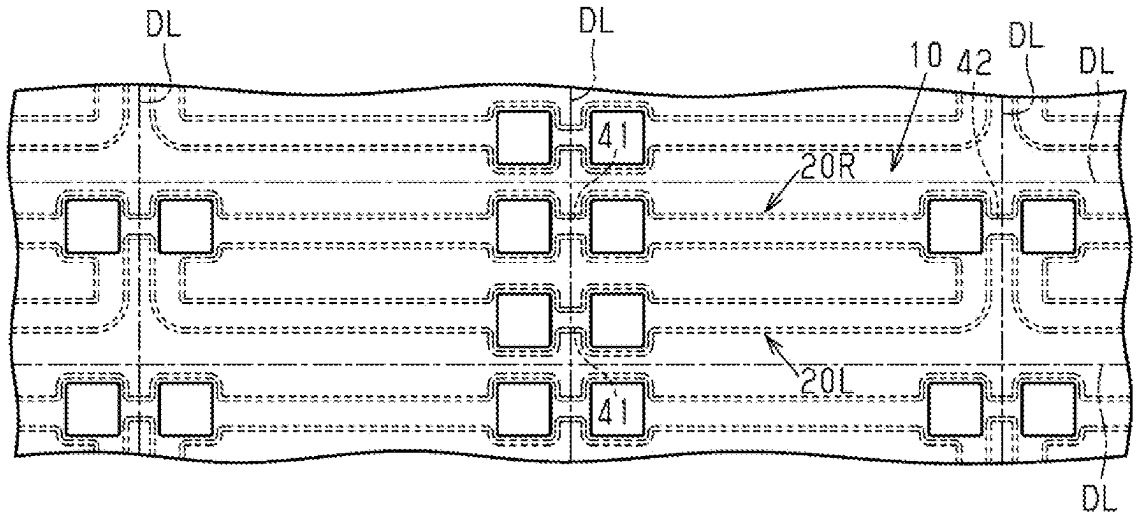

DL
DL
10
42
DL
DL
41
20R
20L
41
DL

FIG. 21

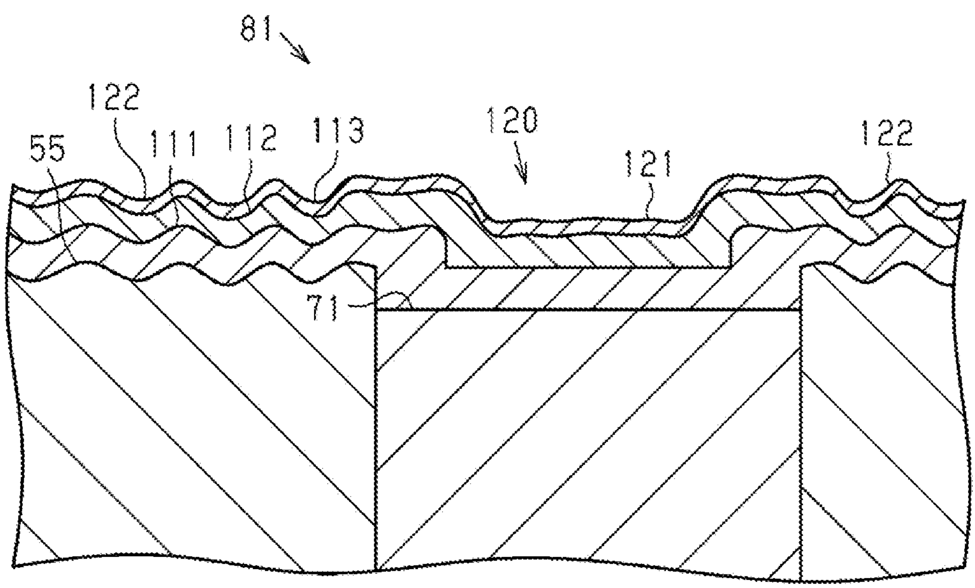
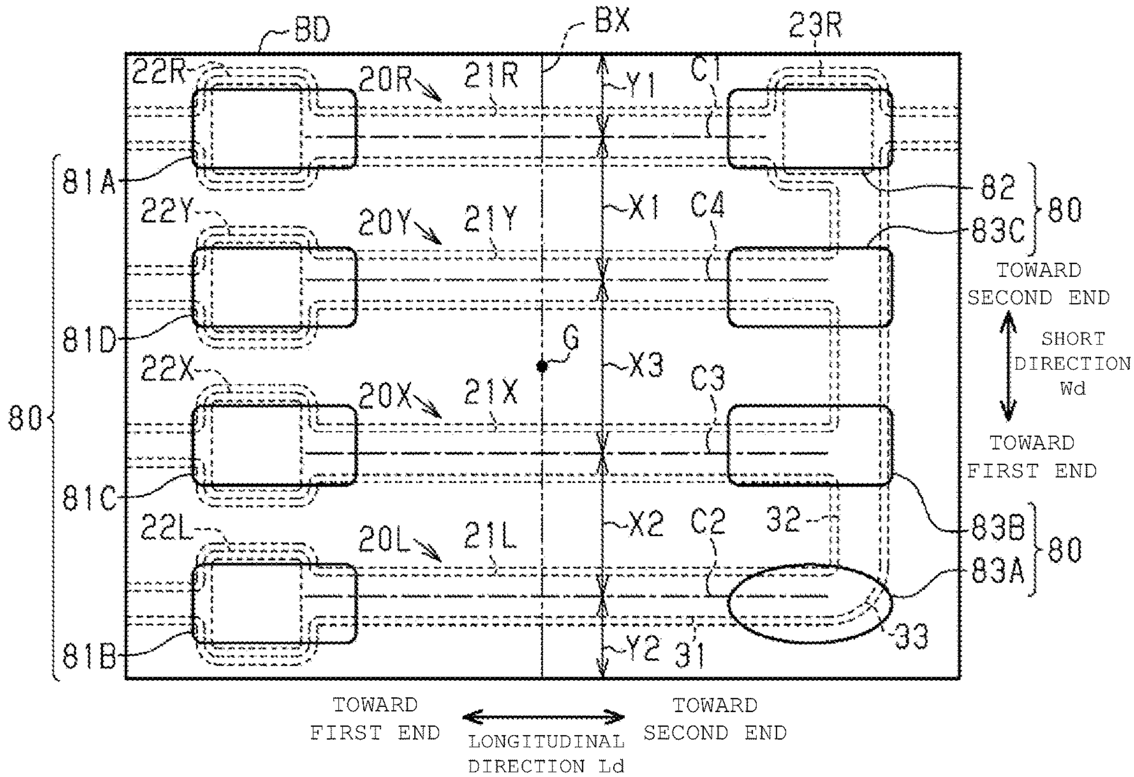

81
122
111
112
113
120
121
122
55
71

FIG. 22


BD
BX
23R
22R
20R
21R
Y1
C1
81A
82
83C
80
22Y
20Y
21Y
X1
C4
TOWARD SECOND END
81D
G
SHORT DIRECTION Wd
22X
X3
C3
20X
21X
TOWARD FIRST END
80
81C
32
83B
22L
X2
C2
20L
21L
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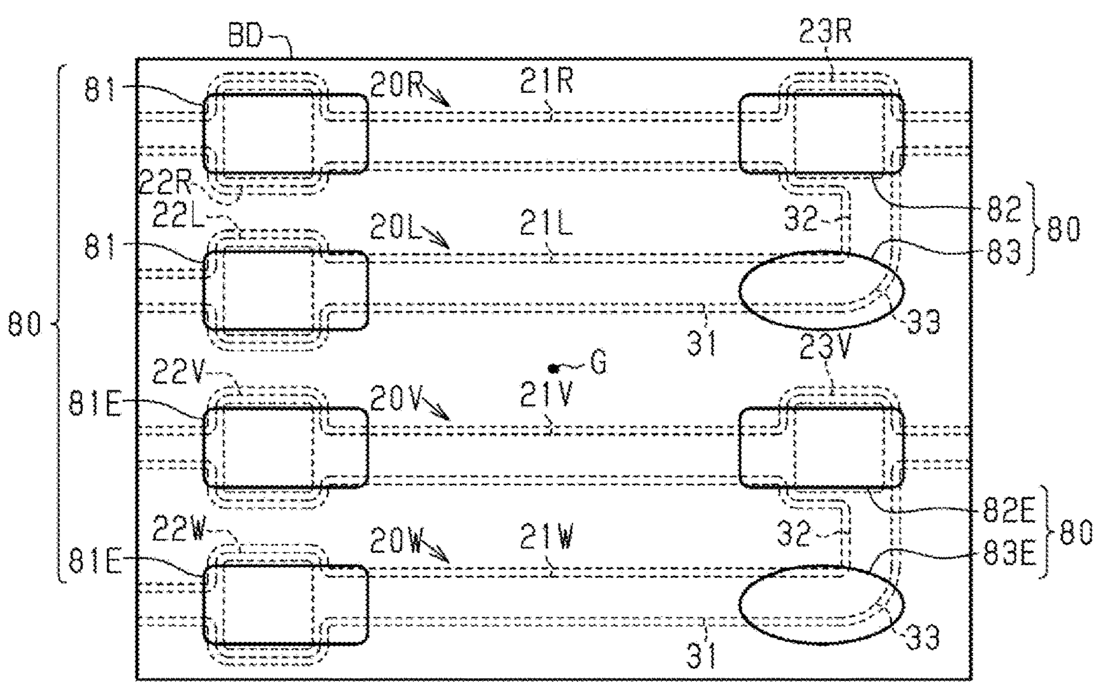
33
81B
Y2
31
TOWARD FIRST END
LONGITUDINAL DIRECTION Ld
TOWARD SECOND END

FIG. 23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23V
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22W
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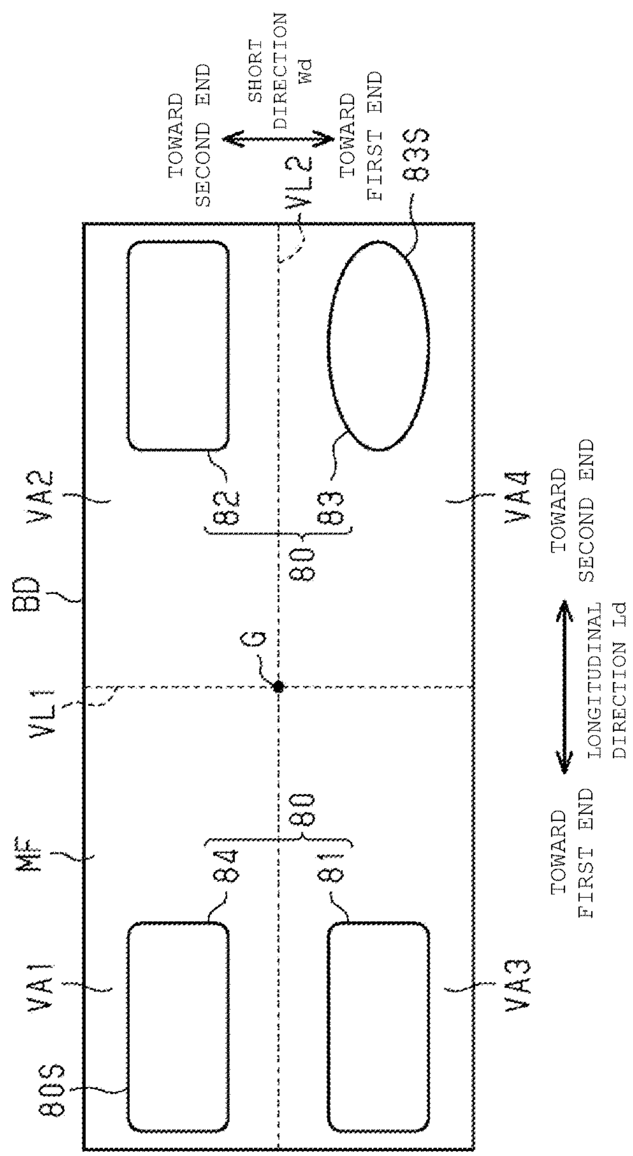
20W
21W
83E
81E
33
31

FIG. 24



TOWARD SECOND END
SHORT DIRECTION Wd
TOWARD FIRST END
VL2
83S
VA2
BD
VL1
MF
VA1
80S
82
80
83
G
84
81
VA4
VA3
TOWARD SECOND END
LONGITUDINAL DIRECTION Ld
TOWARD FIRST END

INDUCTOR COMPONENT

CROSS-REFERENCE TO RELATED APPLICATION

This application claims benefit of priority to Japanese Patent Application No. 2020-142763, filed Aug. 26, 2020, the entire content of which is incorporated herein by reference.

BACKGROUND

Technical Field

The present disclosure relates to an inductor component.

Background Art

The inductor component disclosed in Japanese Patent Application Laid-Open No. 2013-211330 includes a rectangular parallelepiped element body containing a magnetic material. Two inductor wires are disposed inside the element body. Each inductor wire extends in a spiral shape. In addition, the two inductor wires are disposed side by side in the element body. Both ends of each of the inductor wires are exposed from the outer face of the element body. That is, the four ends of the inductor wire are exposed from the outer face of the element body. Four external terminals are formed on the outer face of the element body so as to cover the ends of the inductor wires. The four external terminals are disposed at the corners of the element body. The four external terminals all have the same shape.

SUMMARY

In the inductor component, it is sometimes desired to identify the orientation of the inductor component depending on the arrangement, shape, and the like of the inductor wire. However, all the external terminals provided in the inductor component of Japanese Patent Application Laid-Open No. 2013-211330 have the same shape and are disposed at the corners of the element body. Therefore, it is difficult to accurately identify the orientation of the inductor component disclosed in Japanese Patent Application Laid-Open No. 2013-211330 based only on the appearance.

An aspect of the present disclosure is an inductor component including an element body having a main face, an inductor wire extending in parallel with the main face with the number of turns being 0.5 turns or less in the element body, a vertical wire extending in a thickness direction from the inductor wire toward the main face and connected to the inductor wire, and a plurality of terminal portions exposed from the main face. At least one of the plurality of terminal portions is an external terminal electrically connected to the inductor wire. Each of the other terminal portions other than the external terminal among the plurality of terminal portions is a dummy portion that is not electrically connected to the inductor wire. When viewed from the thickness direction, the main face has a two-fold symmetrical shape with respect to a geometric center of the main face. When the main face is divided into a plurality of mutually congruent imaginary regions, the number of the imaginary regions being equal to the number of the terminal portions when viewed from the thickness direction, the one terminal portion is disposed in each of the imaginary regions. When one of the dummy portions is defined as a specific dummy portion and the terminal portion provided in the imaginary region at a two-fold symmetrical position about the geometric center with respect to the imaginary region in which the specific dummy portion is provided is defined as a specific terminal portion, a shape of the specific dummy portion is different from a shape of the specific terminal portion.

In the inductor component having the above configuration, the shape of the specific dummy portion is different from the shape of the specific terminal portion positioned approximately diagonally to the specific dummy portion. Therefore, by using the shape of the specific dummy portion as an index, the orientation of the inductor component can be more accurately identified.

According to an aspect of the present disclosure, the orientation of the inductor component can be identified.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. **1** is an exploded perspective view of an inductor component;

FIG. **2** is a transparent top view of an inductor component;

FIG. **3** is a sectional view of the inductor component taken along line **3-3** in FIG. **2**;

FIG. **4** is a sectional view of the inductor component taken along line **4-4** in FIG. **2**;

FIG. **5** is a sectional view of the inductor component taken along line **5-5** in FIG. **2**;

FIG. **6** is a side view illustrating a first side face of the inductor component;

FIG. **7** is an explanatory diagram of a method of manufacturing the inductor component;

FIG. **8** is an explanatory diagram of a method of manufacturing the inductor component;

FIG. **9** is an explanatory diagram of a method of manufacturing the inductor component;

FIG. **10** is an explanatory diagram of a method of manufacturing the inductor component;

FIG. **11** is an explanatory diagram of a method of manufacturing the inductor component;

FIG. **12** is an explanatory diagram of a method of manufacturing the inductor component;

FIG. **13** is an explanatory diagram of a method of manufacturing the inductor component;

FIG. **14** is an explanatory diagram of a method of manufacturing the inductor component;

FIG. **15** is an explanatory diagram of a method of manufacturing the inductor component;

FIG. **16** is an explanatory diagram of a method of manufacturing the inductor component;

FIG. **17** is an explanatory diagram of a method of manufacturing the inductor component;

FIG. **18** is an explanatory diagram of a method of manufacturing the inductor component;

FIG. **19** is an explanatory diagram of a method of manufacturing the inductor component;

FIG. **20** is an explanatory diagram of a method of manufacturing the inductor component;

FIG. **21** is an enlarged sectional view of part of an external terminal of the inductor component;

FIG. **22** is a transparent top view of an inductor component according to a modification example;

FIG. **23** is a transparent top view of an inductor component according to a modification example; and

FIG. **24** is a top view of an inductor component according to a modification example.

DETAILED DESCRIPTION

Hereinafter, the inductor component will be described. In the drawings, components may be illustrated in an enlarged manner for easy understanding. The dimension ratios of the components may be different from the actual ones or those in another figure.

As illustrated in FIG. **21**, the inductor component **10** as a whole has a structure in which five layers are laminated in the thickness direction Td. In the following description, one side in the thickness direction Td is an upper side, and the opposite side is a lower side.

The first layer L**1** includes the first inductor wire **20**R, the second inductor wire **20**L, the first support wire **41**, the second support wire **42**, the inner magnetic path portion **51**, and the outer magnetic path portion **52**.

The first layer L**1** has a rectangular shape when viewed from the thickness direction Td. A direction along the long side of the rectangular shape is defined as a longitudinal direction Ld, and a direction along the short side is defined as a short direction Wd.

The first inductor wire **20**R includes a first wiring body **21**R, a first pad **22**R provided at the first end of the first wiring body **21**R, and a second pad **23**R provided at the second end of the first wiring body **21**R. The first wiring body **21**R extends linearly in the longitudinal direction Ld of the first layer L**1**. The first pad **22**R is connected to the first end, of the first wiring body **21**R, toward the first end in the longitudinal direction Ld. The dimension of the first pad **22**R in the short direction Wd is larger than the dimension of the first wiring body **21**R in the short direction Wd. The first pad **22**R has a substantially square shape when viewed from the thickness direction Td. In addition, the second pad **23**R is connected to the second end, of the first wiring body **21**R, toward the second end in the longitudinal direction Ld. The dimension of the second pad **23**R in the short direction Wd is larger than the dimension of the first wiring body **21**R in the short direction Wd. When viewed from the thickness direction Td, the second pad **23**R has substantially the same square shape as the first pad **22**R. The first inductor wire **20**R is disposed close to the second end of the first layer L**1** in the short direction Wd.

The second inductor wire **20**L includes a second wiring body **21**L, a first pad **22**L provided at the first end of the second wiring body **21**L, and the above-described second pad **23**R provided at the second end of the second wiring body **21**L.

The second wiring body **21**L has two straight portions and a portion connecting the two straight portions, and extends in an L shape as a whole. Specifically, the second wiring body **21**L includes a long straight portion **31** extending in the longitudinal direction Ld, a short straight portion **32** extending in the short direction Wd, and a connection portion **33** connecting these portions.

As illustrated in FIG. **2**, when a straight line passing through the center of the first layer L**1** in the short direction Wd and extending in the longitudinal direction Ld is defined as a symmetry axis AX, the long straight portion **31** is disposed at a position line-symmetric to that of the first wiring body **21**R with respect to the symmetry axis AX. The length of the long straight portion **31** extending in the longitudinal direction Ld is slightly longer than the length of the first wiring body **21**R extending in the longitudinal direction Ld. The dimension of the long straight portion **31** in the short direction Wd is equal to the dimension of the first wiring body **21**R in the short direction Wd. The first end, of the long straight portion **31**, toward the first end in the longitudinal direction Ld is connected to the first pad **22**L. The second end, of the long straight portion **31**, toward the second end in the longitudinal direction Ld is connected to the first end of the connection portion **33**.

The second end, of the connection portion **33**, that is not connected to the long straight portion **31** faces the second end in the short direction Wd. That is, in the second wiring body **21**L, the connection portion **33** is curved at 90 degrees from the first end side in the longitudinal direction Ld toward the second end side in the short direction Wd.

The second end facing the second end of the connection portion **33** in the short direction Wd is connected to the first end of the short straight portion **32**. The dimension of the short straight portion **32** in the longitudinal direction Ld is equal to the dimension of the long straight portion **31** in the short direction Wd. The second end, of the short straight portion **32**, facing the second end in the short direction Wd is connected to the second pad **23**R connected to the first wiring body **21**R. That is, the second pad **23**R in the first inductor wire **20**R is identical to the second pad **23**R in the second inductor wire **20**L.

The number of turns of the second inductor wire **20**L is determined based on the imaginary vector. The start point of the imaginary vector is disposed on the central axis line C**2** extending in the extension direction of the second wiring body **21**L through the center of the wiring width of the second wiring body **21**L. Then, when viewed from the thickness direction Td, when the imaginary vector is moved from the state in which the start point of the second wiring body **21**L is disposed at the first end to the second end of the central axis line C**2**, the number of turns is determined as 1.0 turn when the angle at which the direction of the imaginary vector is rotated is 360 degrees. However, in a case where the direction of the imaginary vector is wound a plurality of times, the number of turns is assumed to increase in a case where the imaginary vector is continuously wound in the same direction. When the imaginary vector is wound in a direction different from the direction of the previous winding, the number of turns is counted again from 0 turn. For example, when winding is performed 180 degrees clockwise and then winding is performed 180 degrees counterclockwise, 0.5 turns are obtained. In the present embodiment, the direction of the imaginary vector imaginarily disposed on the second wiring body **21**L is rotated by 90 degrees at the connection portion **33**. Therefore, the number of turns when the second wiring body **21**L is wound is 0.25 turns. The central axis line C**2** of the second wiring body **21**L is a line that traces a midpoint of the second wiring body **21**L in a direction orthogonal to the direction in which the second wiring body **21**L extends. That is, when viewed from the thickness direction Td, the central axis line C**2** of the second wiring body **21**L has a substantially L shape.

As illustrated in FIG. **2**, the first pad **22**L is connected to the first end, of the long straight portion **31** of the second wiring body **21**L, toward the first end in the longitudinal direction Ld. The first pad **22**L has the same shape as the first pad **22**R connected to the first wiring body **21**R. That is, when viewed from the thickness direction Td, the first pad **22**L has a substantially square shape. In addition, the first pad **22**L is disposed line-symmetrically to the first pad **22**R connected to the first wiring body **21**R with respect to the symmetry axis AX.

In the first layer L**1**, the second support wire **42** extends from a portion, of the second pad **23**R, away from the first wiring body **21**R. That is, the first support wire **41** extends from the edge, of the first pad **22**R, toward the first end in the longitudinal direction Ld. The first support wire **41** extends linearly in parallel with the longitudinal direction Ld. The second support wire **42** extends to a second side face **92**, of the first layer L**1**, toward the second end in the longitudinal direction Ld and is exposed from the second side face **92**. Similarly, in the first layer L**1**, the first support wire **41** extends from a portion, of the first pad **22**L, away from the second wiring body **21**L.

In the first layer L**1**, the second support wire **42** extends from a portion, of the second pad **23**R, away from the first wiring body **21**R. That is, the second support wire **42** extends from the edge, of the second pad **23**R, toward the second end in the longitudinal direction Ld. The second support wire **42** extends linearly in parallel with the longitudinal direction Ld. The second support wire **42** extends to a second side face **92**, of the first layer L**1**, toward the second end in the longitudinal direction Ld and is exposed from the second side face **92**. In the present embodiment, no support wire is provided at a portion, of the second pad **23**R, away from the short straight portion **32** of the second wiring body **21**L.

The first inductor wire **20**R and the second inductor wire **20**L are made of a conductive material. In the present embodiment, the composition of the first inductor wire **20**R and the second inductor wire **20**L can be made of copper with a ratio of 99 wt % or more and sulfur with ratio of 0.1 wt % or more and 1.0 wt % or less (i.e., from 0.1 wt % to 1.0 wt %).

The first support wire **41** and the second support wire **42** are made of the same conductive material as the first inductor wire **20**R and the second inductor wire **20**L. However, part, of the first support wire **41**, including an exposed face **41**A exposed from the first side face **91** is made of a Cu oxide. Similarly, part, of the second support wire **42**, including an exposed face **42**A exposed from the second side face **92** is made of a Cu oxide.

As illustrated in FIG. **21**, in the first layer L**1**, a region between the first inductor wire **20**R and the second inductor wire **20**L is the inner magnetic path portion **51**. The inner magnetic path portion **51** is made of organic resin containing a metal magnetic powder. In the embodiment, the metal magnetic powder is a metal magnetic powder made of an Fe-based alloy or an amorphous alloy. More specifically, the metal magnetic powder is an FeSiCr-based metal powder containing iron. In addition, the average grain diameter of the metal magnetic powder can be about 5 micrometers.

In the embodiment, the grain diameter of the metal magnetic powder is the longest length, among line segments, drawn from an edge to an edge of a sectional shape of the metal magnetic powder appearing in a cross section when cutting the inner magnetic path portion **51**. The average grain diameter is an average of grain diameters of the metal magnetic powder at random three or more points among the metal magnetic powder appearing in a cross section when cutting the inner magnetic path portion **51**.

In the first layer L**1**, when viewed from the thickness direction Td, a region toward the second end in the short direction Wd relative to the first inductor wire **20**R and a region toward the first end in the short direction Wd relative to the second inductor wire **20**L are the outer magnetic path portion **52**. The outer magnetic path portion **52** is made of the same magnetic material as the inner magnetic path portion **51**.

In the present embodiment, the dimension in the thickness direction Td of the first layer L**1**, that is, the dimensions of the first inductor wire **20**R, the second inductor wire **20**L, the first support wire **41**, and the second support wire **42** in the thickness direction Td can be approximately 40 micrometers.

When viewed from the thickness direction Td, a third layer L**3** having the same rectangular shape as the second layer L**2** is laminated on a lower face which is a lower face of the second layer L**2** in the thickness direction Td. The second layer L**2** includes two insulation resins **61** and an insulation resin magnetic layer **53**.

The insulation resins **61** cover the lower faces of the first inductor wire **20**R, the second inductor wire **20**L, the first support wire **41**, and the second support wire **42** in the thickness direction Td. When viewed from the thickness direction Td, the insulation resin **61** has a shape that covers a range slightly wider than the outer edges of the first inductor wire **20**R, the second inductor wire **20**L, the first support wire **41**, and the second support wire **42**. As a result, the one insulation resin **61** has a straight band shape. The other insulation resin **61** has a band shape extending in a substantially L shape. The insulation resin **61** is made of insulation resin, and in the embodiment, for example, can be a polyimide-based resin. The insulation resin **61** has higher insulating properties than the first inductor wire **20**R and the second inductor wire **20**L. The two insulation resins **61** are provided side by side in the short direction Wd corresponding to the number and arrangement of the first inductor wire **20**R and the second inductor wire **20**L, and are connected to each other at the ends.

In the second layer L**2**, a portion excluding the two insulation resins **61** is the insulation resin magnetic layer **53**. The insulation resin magnetic layer **53** is made of the same magnetic material as the inner magnetic path portion **51** and the outer magnetic path portion **52** described above.

When viewed from the thickness direction Td, a third layer L**3** having the same rectangular shape as the second layer L**2** is laminated on a lower face which is a lower face of the second layer L**2** in the thickness direction Td. The third layer L**3** is a first magnetic layer **54**. Therefore, the first magnetic layer **54** is disposed below the first inductor wire **20**R and the second inductor wire **20**L. The first magnetic layer **54** is made of an organic resin containing the metal magnetic powder same as that of the inner magnetic path portion **51**, the outer magnetic path portion **52**, and the insulation resin magnetic layer **53** described above.

On the other hand, when viewed from the thickness direction Td, a fourth layer L**4** having the same rectangular shape as the first layer L**1** is laminated on an upper face which is an upper face of the first layer L**1** in the thickness direction Td. The fourth layer L**4** includes two first vertical wires **71**, one second vertical wire **72**, and a second magnetic layer **55**.

The first vertical wire **71** is directly connected to the upper faces of the first pads **22**R and **22**L in the first inductor wire **20**R and the second inductor wire **20**L without another layer interposed therebetween. That is, the first vertical wire **71**, the first end of the first wiring body **21**R, and the first support wire **41** are connected to the first pad **22**R. The first vertical wire **71**, the first end of the second wiring body **21**L, and the first support wire **41** are connected to the first pad **22**L. The two first vertical wires **71** are disposed in line symmetry with respect to the symmetry axis AX. The first vertical wire **71** is made of the same material as the first inductor wire **20**R and the second inductor wire **20**L. The second vertical wire **72** has a regular square pole shape, and the axial direction of the regular square pole coincides with the thickness direction Td.

As illustrated in FIG. **2**, when viewed from the thickness direction Td, the dimension of each side of the square-shaped first vertical wires **71** is slightly smaller than the dimension of each side of the square-shaped first pads **22**R and **22**L. Therefore, the area of the first pads **22**R and **22**L is larger than the area of the first vertical wire **71** at the connection point with the first pads **22**R and **22**L. When viewed from above in the thickness direction Td, the central axis line CV1 of the first vertical wire **71** coincides with the geometric center of the substantially square first pads **22**R and **22**L. The two first vertical wires **71** are provided corresponding to the number of the first pads **22**R and **22**L.

As illustrated in FIG. **1**, the second vertical wire **72** is directly connected to the upper face of the second pad **23**R in the first inductor wire **20**R without another layer interposed therebetween. That is, the second vertical wire **72**, the second end of the first wiring body **21**R, the second end of the second wiring body **21**L, and the second support wire **42** are connected to the second pad **23**R. The second vertical wire **72** is made of the same material as the first inductor wire **20**R. The second vertical wire **72** has a regular square pole shape, and the axial direction of the regular square pole coincides with the thickness direction Td.

As illustrated in FIG. **2**, when viewed from the thickness direction Td, the dimension of each side of the square-shaped second vertical wire **72** is slightly smaller than the dimension of each side of the square-shaped second pad **23**R. Therefore, the area of the second pad **23**R is larger than the area of the second vertical wire **72** at the connection point with the second pad **23**R. When viewed from above in the thickness direction Td, the central axis line CV2 of the second vertical wire **72** coincides with the geometric center of the substantially square second pad **23**R. The one second vertical wire **72** is provided corresponding to the number of the second pads **23**R.

As illustrated in FIG. **1**, a portion, of the fourth layer L**4**, excluding two first vertical wires **71** and one second vertical wire **72** is the second magnetic layer **55**. Therefore, the second magnetic layer **55** is laminated on the upper faces of the first inductor wire **20**R, the second inductor wire **20**L, and the support wires **41** and **42**. The second magnetic layer **55** is made of the same magnetic material as the first magnetic layer **54** described above.

In the inductor component **10**, the inner magnetic path portion **51**, the outer magnetic path portion **52**, the insulation resin magnetic layer **53**, the first magnetic layer **54**, and the second magnetic layer **55** constitute a magnetic layer **50**. The inner magnetic path portion **51**, the outer magnetic path portion **52**, the insulation resin magnetic layer **53**, the first magnetic layer **54**, and the second magnetic layer **55** are connected, and surround the first inductor wire **20**R and the second inductor wire **20**L. As described above, the magnetic layer **50** has a closed magnetic circuit for the first inductor wire **20**R and the second inductor wire **20**L. Therefore, the first inductor wire **20**R and the second inductor wire **20**L extend inside the magnetic layer **50**. Although the inner magnetic path portion **51**, the outer magnetic path portion **52**, the insulation resin magnetic layer **53**, the first magnetic layer **54**, and the second magnetic layer **55** are illustrated separately, they are integrated as the magnetic layer **50**, and the boundary thereof may not be confirmed.

When viewed from the thickness direction Td, a fifth layer L**5** having the same rectangular shape as the fourth layer L**4** is laminated on an upper face which is an upper face of the fourth layer L**4** in the thickness direction Td. The fifth layer L**5** includes four terminal portions **80** and an insulation layer **90**. Two of the four terminal portions **80** are first external terminals **81** electrically connected to the respective first vertical wires **71**. One of the four terminal portions **80** is a second external terminal **82** electrically connected to the second vertical wire **72**. That is, the first external terminal **81** and the second external terminal **82** are electrically connected to the inductor wires **20**R and **20**L, respectively. The remaining one, of the four terminal portions **80**, other than the first external terminals **81** and the second external terminal **82** is a dummy portion **83** that is not electrically connected to any of the first inductor wire **20**R and the second inductor wire **20**L.

As illustrated in FIG. **2**, when an imaginary straight line BX passing through the center of the fifth layer L**5** in the longitudinal direction Ld and parallel to the short direction Wd is drawn, a point on the upper face of the fifth layer L**5** where the symmetry axis AX and the imaginary straight line BX intersect is the geometric center G of the fifth layer L**5**. The four terminal portions **80** are disposed at the two-fold symmetrical positions with respect to the geometric center G of the fifth layer L**5** when viewed from the thickness direction Td.

The first external terminal **81** is directly connected to the upper face of the first vertical wire **71** without another layer interposed therebetween. When viewed from the thickness direction Td, the second external terminal **82** has a rectangular shape and is located on the second magnetic layer **55**. The area in which the first external terminal **81** is in contact with the first vertical wire **71** is less than or equal to half the whole area of the first external terminal **81**. The rectangular long side of the second external terminal **82** extends in parallel with the longitudinal direction Ld of the fifth layer L**5**, and the short side extends in parallel with the short direction Wd of the fifth layer L**5**. The two first external terminals **81** are provided corresponding to the number of the first vertical wires **71**.

The second external terminal **82** is directly connected to the upper face of the second vertical wire **72** without another layer interposed therebetween. The area in which the second external terminal **82** is in contact with the second vertical wire **72** is less than or equal to half the whole area of the second external terminal **82**. When viewed from the thickness direction Td, the second external terminal **82** has a rectangular shape and is located on the second magnetic layer **55**. The rectangular long side of the second external terminal **82** extends in parallel with the longitudinal direction Ld of the fifth layer L**5**, and the short side extends in parallel with the short direction Wd of the fifth layer L**5**.

As illustrated in FIG. **3**, the dummy portion **83** is disposed on the upper face of the second magnetic layer **55** of the fourth layer L**4**. As illustrated in FIG. **2**, when viewed from the thickness direction Td, the dummy portion **83** has a different shape from the first external terminal **81** and the second external terminal **82**. In the present embodiment, the dummy portion **83** has an elliptical shape when viewed from the thickness direction Td. The shape of the dummy portion **83** is not limited this, and may be, for example, a rectangular shape, a circular shape, or the like as long as the shape is different from those of the first external terminal **81** and the second external terminal **82**. The major axis of the ellipse of the dummy portion **83** extends in parallel with the longitudinal direction Ld of the fifth layer L**5**, and the minor axis extends parallel to the short direction Wd of the fifth layer L**5**.

When viewed from the thickness direction Td, most of the dummy portion **83** overlaps the second inductor wire **20**L. More specifically, when viewed from the thickness direction Td, the dummy portion **83** is disposed at a position at which it overlaps the connection portion **33** in the second inductor wire **20**L. When viewed from the thickness direction Td, the area of the dummy portion **83** is equal to the area of each of the first external terminal **81** and the second external terminal **82**. In the present embodiment, "the same area" allows manufacturing errors. Therefore, when the difference in area between the dummy portion **83** and the first external terminal **81** and the second external terminal **82** is within ±10%, it can be considered that the areas are the same.

A portion, of the fifth layer L**5**, excluding the terminal portion **80** is the insulation layer **90**. In other words, a range of a portion, of the upper face of the fourth layer L**4**, that is not covered with the two first external terminals **81**, the one second external terminal **82**, and the one dummy portion **83** is covered with the insulation layer **90** of the fifth layer L**5**. The insulation layer **90** has higher insulating properties than the magnetic layer **50**, and in the present embodiment, the insulation layer **90** is a solder resist. The dimension of the insulation layer **90** in the thickness direction Td is smaller than the dimension of the terminal portion **80** in the thickness direction Td.

In the present embodiment, the magnetic layer **50**, the insulation resin **61**, and the insulation layer **90** constitute an element body BD. That is, the element body BD has a rectangular shape when viewed from the thickness direction Td. In the present embodiment, the dimension of the element body BD in the thickness direction Td can be about 0.2 mm.

Of the surface of the element body BD, an upper face of the insulation layer **90** in the thickness direction Td is the main face MF. Therefore, the first inductor wire **20**R and the second inductor wire **20**L extend in parallel with the main face MF of the element body BD. The first vertical wire **71** extends in the thickness direction Td from the first pad **22**R of the first inductor wire **20**R toward the main face MF. The first vertical wire **71** is exposed from the main face MF. The first vertical wire **71** extends in the thickness direction Td from the first pad **22**L of the second inductor wire **20**L toward the main face MF. The first vertical wire **71** is exposed from the main face MF. A second vertical wire **72** extends in the thickness direction Td from the second pad **23**R of the first inductor wire **20**R toward the main face MF. The second vertical wire **72** is exposed from the main face MF. The upper face of the terminal portion **80** is exposed from the main face MF and is located above the main face MF in the thickness direction Td. That is, the outer edge of each terminal portion **80** including the dummy portion **83** is in contact with the insulation layer **90**. As in the present embodiment, at least part of the respective faces, of the first vertical wire **71** and the second vertical wire **72**, exposed from the main face MF may be covered with the first external terminal **81** and the second external terminal **82**, respectively.

The element body BD has a first side face **93** perpendicular to the main face MF. The first side face **91** of the first layer L**1** is part of the first side face **93** of the element body BD. The element body BD has a second side face **94** which is a side face perpendicular to the main face MF and is parallel to the first side face **93**. The second side face **92** of the first layer L**1** is part of the second side face **94** of the element body BD. That is, the first support wire **41** extends from the first inductor wire **20**R in parallel with the main face MF, and has an end exposed from the first side face **93** of the element body BD. Similarly, the second support wire **42** extends from the first inductor wire **20**R in parallel with the main face MF, and has an end exposed from the second side face **94** of the element body BD.

In the present embodiment, the geometric center G of the fifth layer L**5** coincides with the geometric center G of the main face MF. When viewed from the thickness direction Td, the geometric center G of the main face MF and the geometric center G of the element body BD coincide with each other. In the present embodiment, the main face MF has a two-fold symmetrical shape with respect to the geometric center G of the main face MF. The shape of the outer edge of the main face MF may be a two-fold symmetrical shape with respect to the geometric center G, and the shape of the main face MF in the thickness direction Td is not considered. For example, the opening in which the terminal portion **80** of the main face MF is disposed may not have a two-fold symmetrical shape with respect to the geometric center G.

As illustrated in FIG. **2**, it is assumed that the main face MF is imaginarily divided into a first region and a second region by the imaginary straight line BX that passes through the geometric center G of the main face MF and is parallel to one side of the main face MF in the short direction Wd. In the present embodiment, when a region toward the first end in the longitudinal direction Ld relative to the imaginary straight line BX is defined as a first region, the dummy portion **83** is not provided in the first region. When a region toward the second end in the longitudinal direction Ld relative to the imaginary straight line BX is defined as a second region, the dummy portions **83** whose number is the same as the number of the second external terminals **82** provided in the second region are provided in the second region. It is assumed that an imaginary straight line is drawn at a position passing through the geometric center G of the main face MF and parallel to one side in the longitudinal direction Ld of the main face MF, that is, at the same position as the symmetry axis AX, and the main face MF is imaginarily divided into the first region and the second region. For example, when a region toward the second end in the short direction Wd relative to the imaginary straight line located at the same position as the symmetry axis AX is defined as the first region, the dummy portion **83** is not provided in the first region. When a region toward the first end in the short direction Wd relative to the imaginary straight line located at the same position as the symmetry axis AX is defined as the second region, the dummy portions **83** whose number is the same as that of the first external terminals **81** are provided in the second region. However, in a case where there is a plurality of imaginary straight lines that passes through the geometric center and is parallel to one side of the main face, the dummy portion may not be provided in the first region when the main face is imaginarily divided by one of the imaginary straight lines, but the dummy portion whose number is equal to or more than the number of the external terminals provided in the second region may be provided in the second region.

In addition, the number of dummy portions **83** provided in the present embodiment is one, and the dummy portions are disposed at positions that are not two-fold symmetric with respect to the geometric center G of the main face MF when viewed from the thickness direction Td.

Here, as illustrated in FIG. **2**, it is assumed that the main face MF is divided into a plurality of mutually congruent imaginary regions whose number is the same as the number of the terminal portions **80** by the imaginary straight line BX and the symmetry axis AX when viewed from the thickness direction Td. That is, it is assumed that the main face MF is divided into four rectangular imaginary regions by the imaginary straight line BX and the symmetry axis AX. At this time, one terminal portion **80** is disposed in each of the four imaginary regions.

Specifically, an imaginary region toward the first end in the longitudinal direction Ld relative to the imaginary straight line BX and toward the second end in the short direction Wd relative to the symmetry axis AX is defined as a first imaginary region VA**1**. The first external terminal **81** of the terminal portion **80** is provided in the first imaginary region VA**1**. An imaginary region toward the second end in the longitudinal direction Ld relative to the imaginary straight line BX and toward the second end in the short direction Wd relative to the symmetry axis AX is defined as a second imaginary region VA**2**. The second external terminal **82** is provided in the second imaginary region VA**2**. An imaginary region toward the first end in the longitudinal direction Ld relative to the imaginary straight line BX and toward the first end in the short direction Wd relative to the symmetry axis AX is defined as a third imaginary region VA**3**. The first external terminal **81** is disposed in the third imaginary region VA**3**. An imaginary region toward the second end in the longitudinal direction Ld relative to the imaginary straight line BX and toward the first end in the short direction Wd relative to the symmetry axis AX is defined as a fourth imaginary region VA**4**. The dummy portion **83** is provided in the fourth imaginary region VA**4**.

The dummy portion **83** provided in the fourth imaginary region VA**4** is defined as a specific dummy portion **83**S, and the terminal portion **80** provided in an imaginary region at the two-fold symmetrical position about the geometric center G of the main face MF in the fourth imaginary region VA**4** where the specific dummy portion **83**S is provided is defined as a specific terminal portion **80**S. That is, the specific terminal portion **80**S is the first external terminal **81** provided in the first imaginary region VA**1**. When viewed from the thickness direction Td, the shape of the specific dummy portion **83**S is an elliptical shape and is different from the shape of the specific terminal portion **80**S.

Next, each wire will be described in detail.

As illustrated in FIG. **2**, when viewed from the thickness direction Td, the central axis line C**1** of the first wiring body **21**R extends in the longitudinal direction Ld. The central axis line C**1** of the first wiring body **21**R is a line that traces a midpoint of the first wiring body **21**R in a direction orthogonal to the direction in which the first wiring body **21**R extends, that is, in the short direction Wd.

As described above, the central axis line C**2** of the second wiring body **21**L of the second inductor wire **20**L extends in a substantially L shape. Here, the wiring length of the long straight portion **31** of the second wiring body **21**L is longer than the wiring length of the first wiring body **21**R. In addition, the second wiring body **21**L has a connection portion **33** and a short straight portion **32**. Therefore, the wiring length of the second wiring body **21**L is longer than the wiring length of the first wiring body **21**R. Specifically, the wiring length of the second wiring body **21**L is 1.2 times or more the wiring length of the first wiring body **21**R.

The inductance value of the second inductor wire **20**L is 1.1 times or more the inductance value of the first inductor wire **20**R, reflecting the difference in the wiring length. In the present embodiment, the inductance value of the first inductor wire **20**R can be approximately 2.5 nH.

The first wiring body **21**R of the first inductor wire **20**R extends along one side of the outer edge of the element body BD in the longitudinal direction Ld. The first pad **22**L and the second pad **23**R of the second inductor wire **20**L are disposed at the symmetrical position with respect to the geometric center G of the element body BD. In the present embodiment, the first pad **22**L and the second pad **23**R of the second inductor wire **20**L are disposed at the two-fold symmetrical positions about the geometric center G.

The first inductor wire **20**R has a parallel portion extending in parallel with the second inductor wire **20**L. Specifically, the first wiring body **21**R and the long straight portion **31** of the second wiring body **21**L correspond to parallel portions. The first wiring body **21**R and the long straight portion **31** are disposed side by side in the short direction Wd in the first layer L**1**. The parallel portions may be substantially parallel, and a manufacturing error is allowed.

In the following description, a distance between the central axis line C**1** of the first wiring body **21**R in the short direction Wd and the central axis line C**2** of the long straight portion **31** of the second wiring body **21**L is defined as a pitch X**1** between the wiring bodies. That is, the pitch between the wiring bodies is a pitch between adjacent parallel portions.

In addition, the interval between the adjacent parallel portions, that is, the distance between the end, of the first wiring body **21**R, toward the first end in the short direction Wd and the end, of the long straight portion **31** of the second wiring body **21**L, toward the second end in the short direction Wd in FIG. **2** is, for example, about 200 micrometers.

As illustrated in FIG. **2**, the distance from the central axis line C**1** of the first wiring body **21**R, which is a parallel portion located toward the second end in the short direction Wd, to the end, of the element body BD, closest to the first wiring body **21**R in the short direction Wd, that is, the end toward the second end, is defined as a first distance Y**1**.

The distance from the central axis line C**2** of the long straight portion **31**, which is a parallel portion located toward the first end in the short direction Wd, to the end, of the element body BD, closest to the long straight portion **31** in the short direction Wd, that is, the end toward the first end, is defined as a second distance Y**2**. In the present embodiment, the first distance Y**1** has the same dimension as the second distance Y**2**.

In the short direction Wd, the pitch X**1** between the wiring bodies is different in dimension from the first distance Y**1** and the second distance Y**2**. Specifically, the pitch X**1** between the wiring bodies can be approximately "250 micrometers". Each of the first distance Y**1** and the second distance Y**2** can be approximately "175 micrometers". Each of the first distance Y**1** and the second distance Y**2** is preferably slightly larger than half the pitch X**1**.

In the present embodiment, the average value of the pitch X**1**, the first distance Y**1**, and the second distance Y**2** is "200 micrometers". The ratio of the pitch X**1** to the average value is "125%". The ratio of the first distance Y**1** and the second distance Y**2** to the average value is "87.5%". Therefore, the ratio of the pitch X**1**, the first distance Y**1**, and the second distance Y**2** to the average value is 50% or more and 150% or less (i.e., from 50% to 150%).

The central axis line A**1** of the first support wire **41** connected to the first pad **22**R of the first inductor wire **20**R extends in the longitudinal direction Ld. The central axis line A**1** of the first support wire **41** is a line that traces a midpoint of the first support wire **41** in a direction orthogonal to the direction in which the first support wire **41** extends, that is, in the short direction Wd.

The central axis line A**1** of the first support wire **41** is located outward in the short direction Wd relative to the central axis line C**1** of the first wiring body **21**R. That is, the central axis line A**1** of the first support wire **41** connected to the first inductor wire **20**R and the central axis line C**1** of the first wiring body **21**R are located on different straight lines.

The extension line of the central axis line A**1** of the first support wire **41** passes through the central axis line CV**1** of the first vertical wire **71**. That is, the extension line of the central axis line A**1** of the first support wire **41** passes through the center of the connection face between the first vertical wire **71** and the first pad **22**R.

The central axis line A**1** of the first support wire **41** connected to the first pad **22**L of the second inductor wire

20L extends in the longitudinal direction Ld. The central axis line A2 of the second support wire 42 is a line that traces a midpoint of the second support wire 42 in the direction orthogonal to the direction in which the second support wire 42 extends, that is, in the short direction Wd.

The central axis line A1 of the first support wire 41 is located outward in the short direction Wd relative to the central axis line C2 of the second wiring body 21L. That is, the extension line of the central axis line A1 of the first support wire 41 connected to the second inductor wire 20L and the central axis line C2 of the second wiring body 21L are located on different straight lines.

The extension line of the central axis line A1 of the first support wire 41 passes through the central axis line CV1 of the first vertical wire 71. That is, the extension line of the central axis line A1 of the first support wire 41 passes through the center of the connection face between the first vertical wire 71 and the first pad 22L.

The first support wire 41 connected to the first inductor wire 20R and the first support wire 41 connected to the second inductor wire 20L are disposed in line symmetry with respect to the symmetry axis AX.

The central axis line A2 of the second support wire 42 extends in the longitudinal direction Ld. The central axis line A2 of the second support wire 42 is a line that traces a midpoint of the second support wire 42 in the direction orthogonal to the direction in which the second support wire 42 extends, that is, in the short direction Wd.

The central axis line A2 of the second support wire 42 is located outward in the short direction Wd relative to the central axis line C1 of the first wiring body 21R. That is, the central axis line A2 of the second support wire 42 and the central axis line C1 of the first wiring body 21R are located on different straight lines.

The second vertical wire 72 is disposed on the central axis line A2 of the second support wire 42. The extension line of the central axis line A2 of the second support wire 42 passes through the central axis line CV2 of the second vertical wire 72. That is, the extension line of the central axis line A2 of the second support wire 42 passes through the center of the connection face between the second vertical wire 72 and the second pad 23R.

The first support wire 41 and the second support wire 42 extending from the first inductor wire 20R are disposed at the same position in the short direction Wd. That is, the central axis line A1 of the first support wire 41 and the central axis line A2 of the second support wire 42 are located on the same straight line. When a deviation is within 10% based on the minimum line width of the first inductor wire 20R and the second inductor wire 20L, they are regarded as being on the same straight line. Specifically, the minimum line width of the first inductor wire 20R and the second inductor wire 20L in the present embodiment can be 50 micrometers, which is the line width of the first wiring body 21R and the second wiring body 21L. Therefore, "on the same straight line" in the present embodiment is a case where the shortest distance between the two axis lines is within 5 micrometers, and "on different straight lines" is a case where the shortest distance between the two axis lines exceeds 5 micrometers.

As described above, in the first layer L1, the respective first support wires 41 are disposed in line symmetry with respect to the symmetry axis AX. Therefore, as illustrated in FIG. 2, a distance Q1 from the end of the element body BD toward the second end in the short direction Wd to the central axis line A1 of the first support wire 41 extending from the first inductor wire 20R is the same as a distance Q2 from the end of the element body BD toward the first end in the short direction Wd to the central axis line A1 of the first support wire 41 extending from the second inductor wire 20L.

On the other hand, in the short direction Wd, the pitch P1 from the central axis line A1 of the first support wire 41 extending from the first inductor wire 20R to the central axis line A1 of the first support wire 41 extending from the second inductor wire 20L is larger than each of the above-described distance Q1 and distance Q2. Specifically, the pitch P1 is about twice each of the distance Q1 and the distance Q2.

As illustrated in FIG. 4, the wiring width H1 of the first wiring body 21R in the short direction Wd is equal to the wiring width H2 of the second wiring body 21L in the short direction Wd. In addition, since the first inductor wire 20R and the second inductor wire 20L are disposed in the same first layer L1, the dimensions of the first wiring body 21R and the second wiring body 21L in the thickness direction Td are also the same. Therefore, the sectional area of the first wiring body 21R in the cross section orthogonal to the central axis line C1 of the first wiring body 21R is equal to the sectional area of the second wiring body 21L. In the present embodiment, when the difference in sectional area between the first wiring body 21R and the second wiring body 21L is 10% or less with respect to the sectional area of each of the wiring bodies 21R, 21L, it is considered that the sectional areas are equal.

As illustrated in FIGS. 4 and 5, the wiring width W1 of the first support wire 41 in the short direction Wd is smaller than the wiring width H1 of the first wiring body 21R in the short direction Wd. Here, the first support wire 41 and the first wiring body 21R are provided in the same first layer L1, and the dimensions in the thickness direction Td are substantially the same. Therefore, the sectional area of each of the first support wires 41 is smaller than the sectional area of the first wiring body 21R by reflecting the difference in wiring width.

Similarly, as illustrated in FIGS. 2 and 4, the wiring width W2 of the second support wire 42 in the short direction Wd is smaller than the wiring width H1 of the first wiring body 21R in the short direction Wd. Therefore, the sectional area of the second support wire 42 is smaller than the sectional area of the first wiring body 21R by reflecting the difference in the wiring width.

As illustrated in FIG. 6, ends of the two first support wires 41 are exposed from the first side face 93, of the element body BD, toward the first end in the longitudinal direction Ld. The shape of the exposed face 41A of each first support wire 41 exposed from the first side face 93 is a shape obtained by slightly extending the sectional shape of the first support wire 41 orthogonal to the central axis line A1. As a result, the area of the exposed face 41A of the first support wire 41 is larger than the sectional area of the first support wire 41 inside the element body BD in the cross section orthogonal to the central axis line A1. Similarly, the second support wire 42 is exposed from the second side face 94, of the element body BD, toward the second end in the longitudinal direction Ld. The area of the exposed face 42A of the second support wire 42 exposed from the second side face 94 is larger than the sectional area of the second support wire 42 inside the element body BD in the cross section orthogonal to the central axis line A2. As a result, the contact areas of the first support wire 41 and the second support wire 42 with the first side face 93 and the second side face 94 of the element body BD are increased, and the adhesion therebetween is improved. The magnitude of the sectional area only is required to satisfy the above relationship, and for example, the exposed face **41**A may have a shape in which one side is extended and the other side is covered with the extended portion of the element body BD.

The number of the first support wires **41** exposed from the first side face **93** is two, the number of the second support wires **42** exposed from the second side face **94** is one, and the number of the exposed support wires is different.

Next, the terminal portion **80** will be described in detail.

The four terminal portions **80** include, for example, a plurality of conductive layers. In the present embodiment, as shown in FIG. **21**, the first external terminal **81** has a three-layer structure of a first metal layer **111**, a second metal layer **112**, and a third metal layer **113**. The first metal layer **111** is laminated on the upper faces of the first vertical wires **71** and the second magnetic layer **55**. The dimension of the first metal layer **111** in the thickness direction Td can be approximately 5 micrometers. The first metal layer **111** is made of copper. The second metal layer **112** is laminated on the upper face of the first metal layer **111**. The dimension of the second metal layer **112** in the thickness direction Td can be approximately 5 micrometers. The second metal layer **112** is made of nickel. The third metal layer **113** is laminated on the upper face of the second metal layer **112**. The dimension of the third metal layer **113** in the thickness direction Td can be approximately 0.1 micrometers. The third metal layer **113** is made of gold. The second external terminal **82** and the dummy portion **83** have the same laminated structure as the first external terminal **81**.

When viewed from the thickness direction Td, the second magnetic layer **55** and the first vertical wire **71** existing on the lower face of the first external terminal **81** in the thickness direction Td may be seen through. Therefore, appearance looks different depending on whether the second magnetic layer **55** or the first vertical wire **71** is present on the lower face of the first external terminal **81**. When viewed from the thickness direction Td, a region, of the second vertical wire **72**, which can be seen through the second external terminal **82** is a region equal to or less than half the second external terminal **82**.

Similarly, the second magnetic layer **55** and the second vertical wire **72** existing on the lower face of the second external terminal **82** in the thickness direction Td may be seen through. Therefore, appearance looks different depending on whether the second magnetic layer **55** or the second vertical wire **72** is present on the lower face of the second external terminal **82**. When viewed from the thickness direction Td, a region, of the second vertical wire **72**, which can be seen through the second external terminal **82** is a region equal to or less than half the second external terminal **82**.

The second magnetic layer **55** existing on the lower face of the dummy portion **83** in the thickness direction Td may be seen through. The dummy portion **83** is not provided on the vertical wire. Therefore, in the embodiment, appearance as a whole looks uniform for the dummy portion **83**. On the other hand, the region, of the second magnetic layer **55**, which can be seen through the first external terminal **81** is a region equal to or more than half the first external terminal **81**. The region, of the second magnetic layer **55**, which can be seen through the second external terminal **82** is a region equal to or more than half the second external terminal **82**. That is, when viewed from the thickness direction Td, the whole dummy portion **83** and half or more of the region of each of the first external terminal **81** and the second external terminal **82** have optically the same color. Here, the same color refers to a color when, for example, a difference between numerical values indicating RGB falls within a predetermined range when a color difference meter is used. The predetermined range is, for example, 10%.

As shown in FIG. **21**, a recess **120**, of the first external terminal **81**, recessed downward in the thickness direction Td is provided on the first vertical wire **71** when viewed from the thickness direction Td. The recess **120** is recessed by, for example, several micrometers from the upper face of the first external terminal **81** in the thickness direction Td.

As shown in FIG. **21**, the surface of the first external terminal **81** is composed of a smooth portion **121** and a rough portion **122** having surface roughness larger than that of the smooth portion **121**. In the present embodiment, the surface roughness of the rough portion **122** is about 1.5 times larger than the surface roughness of the smooth portion **121**. The surface roughness can be measured using a light interference type surface roughness meter (NewView manufactured by ZYGO).

The smooth portion **121** of the first external terminal **81** has a small surface roughness by reflecting that the upper face of the first vertical wire **71** in the thickness direction Td is flat. Therefore, when viewed from the thickness direction Td, the smooth portion **121** is provided on the first vertical wire **71** of the first external terminal **81**. The whole smooth portion **121** is formed on the recess **120**. In addition, the rough portion **122** of the first external terminal **81** has a large surface roughness by reflecting that the surface of the magnetic layer **50** is uneven due to the metal magnetic powder contained in the magnetic layer **50**. Therefore, when viewed from the thickness direction Td, the rough portion **122** is provided on the second magnetic layer **55** of the first external terminal **81**.

As in the first external terminal **81** described above, in the second external terminal **82**, the recess **120** is recessed. The surface of the second external terminal **82** is composed of the smooth portion **121** and the rough portion **122** having surface roughness larger than that of the smooth portion **121**.

When viewed from the thickness direction Td, the smooth portion **121** of the second external terminal **82** is provided on the second vertical wire **72** of the second external terminal **82**. That is, the whole recess **120** has the smooth portion **121** thereon. When viewed from the thickness direction Td, the rough portion **122** of the second external terminal **82** is provided on the second magnetic layer **55** of the second external terminal **82**.

As described above, the whole region of the dummy portion **83** is provided on the second magnetic layer **55**. Therefore, the surface roughness of the dummy portion **83** is substantially the same as those of the rough portion **122** of the first external terminal **81** and of the rough portion **122** of the second external terminal **82**. Therefore, the surface roughness of the dummy portion **83** is larger than those of the smooth portion **121** of the first external terminal **81** and the smooth portion **121** of the second external terminal **82**.

Next, a method of manufacturing the inductor component **10** will be described.

As shown in FIG. **7**, first, a base member preparation step is performed. Specifically, the plate-shaped base member **101** is prepared. The base member **101** is made of ceramics. The base member **101** has a quadrangular shape when viewed from the thickness direction Td. The dimension of each side is a dimension in which a plurality of the inductor components **10** is accommodated. In the following description, a direction orthogonal to the plane direction of the base member **101** will be described as the thickness direction Td.

Next, as illustrated in FIG. **8**, a dummy insulation layer **102** is applied to the whole upper face of the base member

101. Next, when viewed from the thickness direction Td, the insulation resin **61** is patterned by photolithography in a range slightly wider than the range in which the first inductor wire **20**R and the second inductor wire **20**L are disposed.

Next, a seed layer forming step of forming a seed layer **103** is performed. Specifically, the copper seed layer **103** is formed on the upper faces of the insulation resin **61** and the dummy insulation layer **102** by performing sputtering from the upper face side of the base member **101**. In the drawings, the seed layer **103** is indicated by a thick line.

Next, as illustrated in FIG. **9**, a first coating step of forming a first coating portion **104** that coats a portion, of the upper face of the seed layer **103**, where the first inductor wire **20**R, the second inductor wire **20**L, the first support wire **41**, and the second support wire **42** are not formed. Specifically, first, a photosensitive dry film resist is applied to the whole upper face of the seed layer **103**. Next, the whole range of the upper face of the dummy insulation layer **102** and the upper face of the outer edge portion, of the upper face of the insulation resin **61**, in the range covered by the insulation resin **61** are solidified by exposure. Thereafter, an unsolidified portion of the applied dry film resist is removed with a chemical solution. As a result, a solidified portion of the applied dry film resist is formed as the first coating portion **104**. On the other hand, the seed layer **103** is exposed in a portion, of the applied dry film resist, which is removed by the chemical solution and is not coated with the first coating portion **104**. The thickness of the first coating portion **104**, which is the dimension of the first coating portion **104** in the thickness direction Td, is slightly larger than the thicknesses of the first wiring body **21**R of the first inductor wire **20**R and the second wiring body **21**L of the second inductor wire **20**L of the inductor component **10** illustrated in FIG. **4**. Photolithography in other steps to be described later is a similar step, and thus a detailed description thereof will be omitted.

Next, as illustrated in FIG. **10**, a wiring processing step of forming the first inductor wire **20**R, the second inductor wire **20**L, the first support wire **41**, and the second support wire **42** by electrolytic plating in a portion, of the upper face of the insulation resin **61**, that is not coated with the first coating portion **104**. Specifically, electrolytic copper plating is performed to grow copper from a portion from which the seed layer **103** is exposed on the upper face of the insulation resin **61**. As a result, the first inductor wire **20**R, the second inductor wire **20**L, the first support wire **41**, and the second support wire **42** are formed. Therefore, in the embodiment, the step of forming the plurality of inductor wires and the step of forming the plurality of first support wires **41** and the plurality of second support wires **42** that connect pads of different inductor wires are the same step. The first inductor wire **20**R, the second inductor wire **20**L, the first support wire **41**, and the second support wire **42** are formed on the same plane. In FIG. **10**, the first inductor wire **20**R and the second inductor wire **20**L are illustrated, and the support wires **41** and **42** are not illustrated.

Next, as illustrated in FIG. **11**, a second coating step of forming a second coating portion **105** is performed. The range in which the second coating portion **105** is formed is a range, of the whole upper face of the first coating portion **104**, the whole upper face of each support wire, and the upper faces of the first inductor wire **20**R and the second inductor wire **20**L, in which the first vertical wire **71** and the second vertical wire **72** are not formed. The second coating portion **105** is formed in this range by the same photolithography as the method of forming the first coating portion **104**. The dimension of the second coating portion **105** in the thickness direction Td is the same as that of the first coating portion **104**.

Next, a wiring processing step of forming each of the vertical wires **71** and **72** is performed. Specifically, the first vertical wire **71** and the second vertical wire **72** are formed by electrolytic copper plating on a portion, of the first inductor wire **20**R and the second inductor wire **20**L, that is not coated with the second coating portion **105**. In the vertical wiring processing step, the upper end of the growing copper is set to be slightly lower than the upper face of the second coating portion **105**. Specifically, the dimension of each of the vertical wires **71** and **72** in the thickness direction Td before cutting described later is set to be the same as the dimension of each of the inductor wires **20**R and **20**L in the thickness direction Td.

Next, as illustrated in FIG. **12**, a coating portion removing step of removing the first coating portion **104** and the second coating portion **105** is performed. Specifically, the first coating portion **104** and the second coating portion **105** are removed by wet etching the first coating portion **104** and the second coating portion **105** with a chemical. In FIG. **12**, the first vertical wire **71** is illustrated, and the second vertical wire **72** is not illustrated.

Next, a seed layer etching step of etching the seed layer **103** is performed. The exposed seed layer **103** is removed by etching the seed layer **103**. As described above, each inductor wire and each support wire are formed by a semi additive process (SAP).

Next, as illustrated in FIG. **13**, a second magnetic layer processing step of laminating the inner magnetic path portion **51**, the outer magnetic path portion **52**, the insulation resin magnetic layer **53**, and the second magnetic layer **55** is performed. Specifically, first, a resin containing the magnetic powder, which is the material of the magnetic layer **50**, is applied to the upper face of the base member **101**. At this time, the resin containing the magnetic powder is applied so as to cover the upper faces of the vertical wires **71** and **72**. Next, the resin containing the magnetic powder is hardened by press working to form the inner magnetic path portion **51**, the outer magnetic path portion **52**, the insulation resin magnetic layer **53**, and the second magnetic layer **55** on the upper face of the base member **101**.

Next, as illustrated in FIG. **14**, the upper portion of the second magnetic layer **55** is scraped until the upper faces of the vertical wires **71** and **72** are exposed. At this time, the second magnetic layer **55** is scraped such that the upper face of the second magnetic layer **55** is located above the upper faces of the vertical wires **71** and **72** in the thickness direction Td. The inner magnetic path portion **51**, the outer magnetic path portion **52**, the insulation resin magnetic layer **53**, and the second magnetic layer **55** are integrally formed, but in the drawing, the inner magnetic path portion **51**, the outer magnetic path portion **52**, the insulation resin magnetic layer **53**, and the second magnetic layer **55** are illustrated separately.

Next, as illustrated in FIG. **15**, an insulation layer processing step is performed. Specifically, a solder resist functioning as the insulation layer **90** is patterned by photolithography in a portion, of the upper face of the second magnetic layer **55** and the upper face of each of the vertical wires **71** and **72**, where the terminal portion **80** is not formed. In the present embodiment, the direction orthogonal to the upper face of the insulation layer **90**, that is, the main face MF of the element body BD, is the thickness direction Td.

Next, as illustrated in FIG. **16**, a base member cutting step is performed. Specifically, the base member **101** and the dummy insulation layer **102** are all removed by cutting. As a result of cutting the whole dummy insulation layer **102**, part of the lower portions of the respective insulation resins are removed by cutting, but the inductor wires **20**R and **20**L are not removed.

Next, as illustrated in FIG. **17**, a first magnetic layer processing step of laminating the first magnetic layer **54** is performed. Specifically, first, a resin containing the magnetic powder, which is the material of the first magnetic layer **54**, is applied to the lower face of the base member **101**. Next, the resin containing the magnetic powder is hardened by press working to form the first magnetic layer **54** on the lower face of the base member **101**.

Next, the lower end of the first magnetic layer **54** is scraped. For example, the lower end of the first magnetic layer **54** is scraped so that the dimension from the upper face of each of the external terminals **81** and **82** to the lower face of the first magnetic layer **54** is a desired value.

Next, as illustrated in FIG. **18**, a terminal portion processing step is performed. Specifically, the first external terminal **81**, the second external terminal **82**, and the dummy portion **83** are formed on a portion, the upper face of the second magnetic layer **55** and the upper face of each of the vertical wires **71** and **72**, which is not covered with the insulation layer **90**. In this step, first, the first metal layer **111** is formed by electroless plating of copper for each of the first external terminal **81**, the second external terminal **82**, and the dummy portion **83**. Next, the second metal layer **112** is formed by electroless plating of nickel. Thereafter, the third metal layer **113** is formed by electroless plating of gold. A catalyst layer such as palladium may be provided between the first metal layer **111** and the second metal layer **112**. As a result, the first external terminal **81**, the second external terminal **82**, and the dummy portion **83** having a three-layer structure are formed.

The upper face of each of the vertical wires **71** and **72** is located below the upper face of the second magnetic layer **55** in the thickness direction Td. Therefore, the recess **120** recessed downward in the thickness direction Td is formed in the external terminals **81** and **82** on the vertical wires **71** and **72**, respectively. In addition, the smooth portions **121** and the rough portions **122** are formed in the first external terminal **81** and the second external terminal **82** by reflecting the surface roughness of the vertical wires **71** and **72** or the second magnetic layer **55** located below them.

In FIG. **18**, the first external terminal **81** is illustrated, and the second external terminal **82** and the dummy portion **83** are not illustrated. Further, in FIG. **18**, the recess **120**, the smooth portion **121**, and the rough portion **122** are not illustrated.

Next, as illustrated in FIG. **19**, a segmenting step is performed. Specifically, segmentation is performed by cutting with a dicing machine at the break line DL. As a result, the inductor component **10** can be obtained.

In a state before cutting with a dicing machine, for example, as illustrated in FIG. **20**, a plurality of inductor components is disposed in parallel in the longitudinal direction Ld and the short direction Wd, and the individual inductor components are connected by the element body BD, the first support wire **41**, and the second support wire **42**. Specifically, the first support wires **41** are connected to each other, and the second support wires **42** are connected to each other. By cutting the first support wire **41** and the second support wire **42** including the break line DL in the thickness direction Td, the cut face of the first support wire **41** is exposed from the first side face **93** as the exposed face **41**A. Further, the cut face of the second support wire **42** is exposed from the second side face **94** as the exposed face **42**A.

After the segmenting step, each inductor component **10** is allowed to stand for a certain period in the presence of oxygen. As a result, a portion including the exposed face **41**A of the first support wire **41** and a portion including the exposed face **42**A of the second support wire **42** are oxidized to form a Cu oxide.

Next, the operation of the present embodiment will be described.

When the first external terminal **81** and the second external terminal **82** are irradiated with light from a low angle, a difference in optical color due to a difference in surface roughness occurs between the smooth portion **121** and the rough portion **122**. When light is applied from a low angle, a surface having a relatively small surface roughness appears to have lower luminance, and a surface having a relatively large surface roughness appears to have higher luminance. Therefore, in the first external terminal **81** and the second external terminal **82**, the color of the rough portion **122** looks brighter than that of the smooth portion **121**. A difference in color on the above-described first external terminal **81** and the second external terminal **82** is caused by the above-described difference in surface roughness.

On the other hand, the surface roughness of the dummy portion **83** is substantially the same as the surface roughness of the rough portion **122**. Therefore, when light is applied to the dummy portion **83** from a low angle as described above, the dummy portion **83** appears in the same color as a whole. The color of the dummy portion **83** is substantially the same as that of the rough portion **122** of the first external terminal **81** and the second external terminal **82**.

Next, effects of the present embodiment will be described.

(1) In the above embodiment, the shape of the dummy portion **83** is different from those of the first external terminal **81** and the second external terminal **82** when viewed from the thickness direction Td. That is, the shape of the specific dummy portion **83**S is different from the shape of the specific terminal portion **80**S. In the present embodiment, since the number of dummy portions **83** provided in the inductor component **10** is one, the dummy portions **83** are provided asymmetrically with respect to the geometric center G of the main face MF. Therefore, the orientation of the inductor component **10** can be easily identified by the dummy portion **83**. When the orientation of the inductor component **10** can be determined, for example, it is easy to correctly install the inductor component **10** when mounting the inductor component **10** on a substrate.

The terminal portions **80** are disposed at the two-fold symmetrical positions with respect to the geometric center G of the main face MF. As compared with a case where the terminal portions **80** are disposed at the asymmetric position, the weight of the inductor component **10** is well balanced, and inclination hardly occurs at the time of mounting.

(2) In the above embodiment, when viewed from the thickness direction Td, the area of the dummy portion **83** is equal to that of each of the first external terminal **81** and the second external terminal **82**. Therefore, when the dummy portion **83** is soldered to the substrate or the like in the same manner as the first external terminal **81** and the second external terminal **82**, the amount of solder applied onto these four terminal portions **80** can be made uniform. Therefore,

it is possible to prevent the inductor component **10** from being tilted and mounted on a substrate or the like.

(3) In the above embodiment, the dummy portion **83** is not provided in the first region of the main face MF. In addition, the number of dummy portions **83** provided in the above embodiment is one. That is, the inductor component **10** is provided with the minimum number of dummy portions **83**. By minimizing the number of dummy portions **83**, it is possible to suppress an increase in weight of the inductor component **10**.

(4) In the above embodiment, when viewed from the thickness direction Td, most of the dummy portion **83** overlaps the second inductor wire **20**L. The second inductor wire **20**L is made of a material different from that of the magnetic layer **50** disposed around the second inductor wire **20**L. Therefore, the second inductor wire **20**L and the magnetic layer **50** have different linear expansion coefficients. Therefore, when a change in temperature occurs in the inductor component **10**, warpage or the like may occur in the inductor component **10** due to a difference in deformation amount between the second inductor wire **20**L and the magnetic layer **50**. Since the dummy portion **83** is disposed so as to overlap the second inductor wire **20**L, the dummy portion **83** can function as a reinforcing portion that suppresses warpage or the like of the inductor component **10**.

(5) In the above embodiment, each of the terminal portions **80** includes the first metal layer **111**, the second metal layer **112**, and the third metal layer **113**. That is, the dummy portion **83** can be formed in the same step as the first external terminal **81** and the second external terminal **82**. Therefore, when the dummy portion **83** is newly provided, it is possible to suppress an increase in the number of manufacturing processes of the inductor component **10**.

(6) In the above embodiment, when viewed from the thickness direction Td, the whole dummy portion **83** and half or more of the regions of the first external terminal **81** and the second external terminal **82** have optically the same color. When the first external terminal **81** and the second external terminal **82** are inspected, the color of their surfaces may be determined to ensure quality. Therefore, when the dummy portion **83** has the same color as the first external terminal **81** and the second external terminal **82**, the inspection by the determination of the same color can also be applied to the dummy portion **83**.

(7) In the above embodiment, the first external terminal **81** and the second external terminal **82** include the rough portion **122**. When the inductor component **10** is mounted, the terminal portion **80** and the substrate may be mounted by solder. Since the surface area of the rough portion **122** is larger than that of the smooth portion **121**, the contact area with the solder increases. This makes it easy to maintain the connection strength with solder.

(8) In the above embodiment, the first external terminal **81** and the second external terminal **82** include the smooth portion **121**. The smooth portion **121** is disposed on each of the vertical wires **71** and **72** when viewed from the thickness direction Td. As described above, when the inductor component **10** is mounted, the terminal portion **80** and the substrate may be mounted by solder. Since the surface roughness of the smooth portion **121** is smaller than that of the rough portion **122**, the wettability of the solder is improved. Therefore, at the time of soldering, the solder easily spreads to the smooth portion **121**, and conductivity by the solder can be reliably ensured.

(9) In the above embodiment, the recess **120** is provided in the first external terminal **81** and the second external terminal **82**. When the inductor component **10** is mounted on a substrate or the like, a spherical solder ball may be attached to the inductor component, and then the solder may be melted to perform mounting. At this time, the presence of the recess **120** makes it easy to place the solder ball. The recess **120** is formed on each of the vertical wires **71** and **72** when viewed from the thickness direction Td. Therefore, in the case of forming the solder ball to perform mounting as described above, when the solder balls are melted, the solder easily spreads to the recess **120**, and when viewed from the thickness direction Td, the solder easily spreads over the vertical wires **71** and **72**.

(10) In the above embodiment, the dummy portion **83** is disposed on the upper face of the second magnetic layer **55**, and the outer edge of the dummy portion **83** is in contact with the insulation layer **90**. As described above, after the insulation layer **90** is patterned on the upper face of the second magnetic layer **55**, the terminal portion **80** is formed by electroless plating at a non-pattern portion. Therefore, the dummy portion **83** can be easily formed in a shape different from the external terminals **81** and **82** by the patterning shape of the insulation layer **90**.

(11) In the above embodiment, the second pad **23**R in the first inductor wire **20**R is identical to the second pad **23**R in the second inductor wire **20**L. The volume of the magnetic layer **50** in the inductor component **10** of the above embodiment is larger by one pad and one vertical wire than an inductor component in which each inductor wire has two different pads. Since the volume of the magnetic layer **50** is large, the inductance acquisition efficiency tends to be large.

(12) In the above embodiment, the first wiring body **21**R extends linearly. The second wiring body **21**L includes the long straight portion **31** extending in the longitudinal direction Ld, the short straight portion **32** extending in the short direction Wd, and the connection portion **33** connecting these portions, and extends in an L shape. That is, the number of connection portions is small in both the first inductor wire **20**R and the second inductor wire **20**L, and the number of turns of the wiring is small. Since the number of turns of the inductor wires **20**R and **20**L is small and routing of the wires is small, direct current resistance in each of the inductor wires **20**R and **20**L is reduced, and inductance acquisition efficiency is easily secured.

(13) In the above embodiment, the average value of the pitch **X1**, the first distance **Y1**, and the second distance **Y2** is "200 micrometers". The ratio of the pitch **X1** to the average value is "125%". The ratio of the first distance **Y1** and the second distance **Y2** to the average value is "87.5%".

When there is a deviation in the above ratios, the arrangement of the inductor wires **20**R and **20**L in the element body BD is deviated. When there is a deviation in the arrangement of the inductor wire in the element body BD, the weight balance of the element body BD is deviated, and the inductor component may be tilted and mounted on the substrate. Therefore, it is preferable that the inductor wires be disposed in the element body BD without large deviation. Specifically, the above ratios are preferably 50% or more and 150% or less (i.e., from 50% to 150%), and in the present embodiment, the value of each ratio falls within the above range, which is a preferable state.

(14) In the above embodiment, the pitch X**1** is longer than the first distance **Y1** and the second distance **Y2**. When the pitch **X1** is longer than the first distance **Y1** and the second distance **Y2**, the length of the short straight portion **32** of the second wiring body **21**L tends to be longer, and the wiring length of the second inductor wire **20**L is easily designed to be long.

(15) In the above embodiment, the distance between the adjacent parallel portions of the wiring bodies is 200 micrometers. From the viewpoint of suppressing the disturbance of the magnetic flux between the inductor wires, the minimum interval is preferably 50 micrometers or more, and more preferably about 100 micrometers or more.

(16) In the above embodiment, the dimension of the element body BD in the thickness direction Td is about 0.2 mm. The smaller the dimension of the element body BD in the thickness direction Td, the smaller the dimension protruding from the substrate when the inductor component **10** is mounted on the substrate. Therefore, the inductor component **10** according to the above embodiment can also be mounted on a portion where it cannot be mounted when the dimension in the thickness direction Td is large.

(17) In the above embodiment, the first inductor wire **20**R, the second inductor wire **20**L, the first support wire **41**, and the second support wire **42** are present in the first layer L**1**. In a state in which the plurality of inductor components **10** is disposed side by side, that is, in a state before cutting with a dicing machine, a configuration in which the plurality of inductor wires is connected by the first support wire **41** and the second support wire **42** can be employed. When the plurality of first inductor wires **20**R and the plurality of second inductor wires **20**L are connected by the first support wire **41** and the second support wire **42**, these inductor wires can be supported and positioned without requiring an insulation substrate or the like for supporting the inductor wire. Therefore, it is possible to contribute to thinning of the inductor component **10** in that an insulation substrate or the like for supporting the inductor wire is unnecessary.

(18) In the above embodiment, the first support wire **41** and the second support wire **42** are in close contact with the magnetic layer **50**. Since the magnetic layer **50** is in close contact with the first support wire **41** and the second support wire **42**, the volume of the magnetic layer **50** can be secured, and the acquisition efficiency of the inductance of the inductor component **10** is easily secured.

(19) In the above embodiment, the exposed face **41**A of the first support wire **41** is made of a Cu oxide in the present embodiment. Since the exposed face **41**A is made of a Cu oxide, the conductivity is reduced at the exposed face **41**A. Therefore, when another electric component and the exposed face **41**A come into contact with each other, it is possible to prevent a current from flowing with the exposed face **41**A interposed therebetween. The same applies to the second support wire **42**.

The present embodiment can be modified as follows. The present embodiment and the following modification examples can be implemented in combination with each other within a range not technically contradictory.

Three or more inductor wires may be provided inside the element body BD.

In the example illustrated in FIG. **22**, in addition to the first inductor wire **20**R and the second inductor wire **20**L, a third inductor wire **20**X and a fourth inductor wire **20**Y extend into the element body BD. A third wiring body **21**X of the third inductor wire **20**X extends in parallel with the first wiring body **21**R of the first inductor wire **20**R. The third wiring body **21**X is disposed between the first wiring body **21**R and the long straight portion **31** of the second wiring body **21**L. The first end of the third wiring body **21**X is connected to the short straight portion **32** of the second wiring body **21**L. That is, part of the wiring of the third inductor wire **20**X is shared with the second inductor wire **20**L. A first pad **22**X is connected to the second end of the third wiring body **21**X.

A fourth wiring body **21**Y of the fourth inductor wire **20**Y extends in parallel with the first wiring body **21**R of the first inductor wire **20**R. The fourth wiring body **21**Y is disposed between the first wiring body **21**R and the third wiring body **21**X. The first end of the fourth wiring body **21**Y is connected to the short straight portion **32** of the second wiring body **21**L. That is, part of the wiring of the fourth inductor wire **20**Y is shared with the second inductor wire **20**L. A first pad **22**Y is connected to the second end of the fourth wiring body **21**Y.

The first wiring body **21**R of the first inductor wire **20**R extends in parallel with one side of the outer edge of the element body BD. The second pad **23**R of the first inductor wire **20**R and the second pad **23**R of the second inductor wire **20**L are the identical pad. The first pad **22**L and the second pad **23**R of the second inductor wire **20**L are disposed at symmetrical positions with respect to the geometric center G. That is, the first inductor wire **20**R and the second inductor wire **20**L are disposed along three sides of the quadrangular shape of the element body BD and extend in a wide range of the element body BD. Therefore, it is easy to secure a large acquisition range of the inductance of the inductor component.

In the example illustrated in FIG. **22**, the third wiring body **21**X of the third inductor wire **20**X and the fourth wiring body **21**Y of the fourth inductor wire **20**Y are parallel portions extending in parallel with the first wiring body **21**R. A distance from the central axis line C**1** of the first wiring body **21**R to the central axis line C**4** of the fourth wiring body **21**Y at the parallel portion and in a direction orthogonal to the direction in which the parallel portion extends is defined as a pitch X**1**. A distance from the central axis line C**2** of the second wiring body **21**L to the central axis line C**3** of the third wiring body **21**X at the parallel portion and in a direction orthogonal to the direction in which the parallel portion extends is defined as a pitch X**2**. In addition, a distance from the central axis line C**3** of the third wiring body **21**X to the central axis line C**4** of the fourth wiring body **21**Y in a direction orthogonal to the direction in which the parallel portion extends is defined as a pitch X**3**. At this time, the pitch X**1** and the pitch X**2** are equal, and the pitch X**3** is larger than the pitches X**1** and X**2**.

As in this modification example, the wiring bodies may be disposed at different pitches. That is, the wiring bodies may not be disposed at equal intervals. When the pitch between the wiring bodies of the inductor wire is different, it is easy to set the magnitude of the inductance value acquired from each inductor wire, and it is easy to make design so that an inductance value suitable for the use conditions of the inductor component **10** can be obtained.

In a case where there are three or more inductor wires and these have parallel portions extending in parallel with each other, when there is a large difference in respective pitches, the inductor wires are unevenly disposed in the element body. Therefore, the arrangement of the external terminals is deviated, or the weight balance of the inductor component is biased. Therefore, the ratio of each pitch to the average value of the pitches is preferably 85% or more and 115% or less (i.e., from 85% to 115%).

In the example illustrated in FIG. **22**, the pitch X**1** can be "250 micrometers", the pitch X**2** can be "250 micrometers", and the pitch X**3** can be "310 micrometers". The average value of the pitches is thus approximately "270 micrometers". The ratio of each pitch to the average value of the pitches is approximately "93%" for the pitch X**1**, approximately "93%" for the pitch X**2**, and approximately "115%" for the pitch X**3**. Therefore, in the example illustrated in

FIG. **21**, the ratio of each pitch to the average value of the pitches is 85% or more and 115% or less for all the pitches (i.e., from 85% to 115%).

Also, in the above embodiment and the example illustrated in FIG. **22**, the ratio of each pitch to the average value of the pitches may be less than 85% or may be more than 115%.

As in the example illustrated in FIG. **22**, the plurality of dummy portions **83** may be provided, or the dummy portions **83** may have different shapes. In the example illustrated in FIG. **22**, the eight terminal portions **80** are provided when viewed from the thickness direction Td. When viewed from the thickness direction Td, a first external terminal **81**A is provided on the first pad **22**R of the first inductor wire **20**R. A first external terminal **81**B is provided on the first pad **22**L of the second inductor wire **20**L. A first external terminal **81**C is provided on the first pad **22**X of the third inductor wire **20**X. A first external terminal **81**D is provided on the first pad **22**Y of the fourth inductor wire **20**Y. The second external terminal **82** is provided on the second pad **23**R of the first inductor wire **20**R. When viewed from the thickness direction Td, the external terminal has a rectangular shape and has a long side extending in parallel with the longitudinal direction Ld.

In addition, a dummy portion **83**A is provided on the connection portion **33** of the second wiring body **21**L. A dummy portion **83**B is provided at a portion where the third wiring body **21**X and the short straight portion **32** of the second wiring body **21**L are connected. A dummy portion **83**C is provided at a portion where the fourth wiring body **21**Y and the short straight portion **32** of the second wiring body **21**L are connected. That is, the number of dummy portions is smaller than that of the external terminals.

The eight terminal portions **80** are disposed at the two-fold symmetrical positions with respect to the geometric center G of the main face MF when viewed from the thickness direction Td.

It is assumed that an imaginary straight line BX passing through the geometric center G from the center of the element body BD in the longitudinal direction Ld and parallel to the short direction Wd is drawn. When a region toward the first end in the longitudinal direction Ld relative to the imaginary straight line BX is defined as a first region, the dummy portion is not provided in the first region. When a region toward the second end in the longitudinal direction Ld relative to the imaginary straight line BX is defined as a second region, three dummy portions are provided in the second region, and the number of dummy portions is equal to or larger than the number of external terminal portions.

Among the dummy portions, the dummy portion **83**A formed on the connection portion **33** has a shape different from other dummy portions. Specifically, when viewed from the thickness direction Td, the dummy portion **83**A has an elliptical shape and the other dummy portions **83**B and **83**C have the same rectangular shape as the external terminal. The shape of the dummy portion **83**A is not limited to the elliptical shape, but may be, for example, a rectangular shape or a circular shape different from the external terminal.

As illustrated in FIG. **22**, in a case where a plurality of dummy portions is provided, when the shape of at least one of the plurality of dummy portions is different from that of the external terminal, the direction of the inductor component can be identified. In the example illustrated in FIG. **22**, the number of dummy portions is larger than the number of external terminals in the second region. When the inductor component is soldered to the substrate, since the terminal portion **80** is soldered, the fixing force of the inductor component is improved as the number of the terminal portions **80** increases. However, when the number of the terminal portions **80** is reflected and the inductor component is provided with the vertical wires whose number is the same as the number of the terminal portions **80**, the volume of the magnetic layer **50** decreases and the inductance acquisition efficiency deteriorates. Therefore, in the inductor component of the example illustrated in FIG. **22**, by increasing the number of dummy portions, the volume of the magnetic layer **50** is not reduced, and the fixing of the inductor component is easily maintained.

In the example illustrated in FIG. **23**, in addition to the first inductor wire **20**R and the second inductor wire **20**L, a third inductor wire **20**V and a fourth inductor wire **20**W extend into the element body BD. The third inductor wire **20**V has the same shape as the first inductor wire **20**R. The fourth inductor wire **20**W has the same shape as the second inductor wire **20**L. That is, the third wiring body **21**V extends linearly, and a fourth wiring body **21**W includes the long straight portion **31**, the short straight portion **32**, and the connection portion **33** and extends in a substantially L shape.

The first end of the third wiring body **21**V is connected to a first pad **22**V, and the second end is connected to a second pad **23**V. The first end of the fourth wiring body **21**W is connected to a first pad **22**W, and the second end is connected to the second pad **23**V. When viewed from the thickness direction Td, a third external terminal **81**E is provided on the first pad **22**V. The third external terminal **81**E is provided on the first pad **22**W. A fourth external terminal **82**E is provided on the second pad **23**V. A dummy portion **83**E is provided on the connection portion **33** of the fourth wiring body **21**W. When viewed from the thickness direction Td, the shapes of the third external terminal **81**E and the fourth external terminal **82**E are rectangular and are the same as those of the first external terminal **81** and the second external terminal **82**. The shape of the dummy portion **83**E is elliptical and is the same as that of the dummy portion **83**. In the example illustrated in FIG. **23**, the four first external terminals, the two second external terminals, and the two dummy portions **83** are provided, and the eight terminal portions **80** are provided.

In the example illustrated in FIG. **23**, the eight terminal portions are provided two-fold symmetrically with respect to the geometric center G of the element body BD.

As in the example illustrated in FIG. **23**, a plurality of pads in which a plurality of inductor wires is connected may be provided in the element body BD.

As in the example illustrated in FIG. **23**, the plurality of dummy portions **83** may be provided, and the shape of the dummy portion **83** when viewed from the thickness direction Td may match in all the dummy portions **83**.

As illustrated in FIG. **24**, the dummy portion **83** may be disposed at the two-fold symmetrical position with respect to the geometric center G of the main face MF. In the example illustrated in FIG. **24**, the four terminal portions **80** are provided when viewed from the thickness direction Td. The four terminal portions **80** are disposed at four corners of the main face MF and are disposed at the two-fold symmetrical positions with respect to the geometric center G of the main face MF. Among the four terminal portions **80**, the first external terminal **81** is disposed at a corner toward the first end in the longitudinal direction Ld and toward the first end in the short direction Wd. The second external terminal **82** is disposed at a corner toward the second end in the longitudinal direction Ld and toward the second end in the short direction Wd. Although not illustrated, each of the first external terminal **81** and the second external terminal **82** is connected to the end of the inductor wire extending inside the element body BD with the vertical wire interposed therebetween. The first external terminal **81** and the second external terminal **82** are rectangular and have the same shape when viewed from the thickness direction Td.

Among the four terminal portions **80**, the first dummy portion **83** is provided at a corner toward the second end in the longitudinal direction Ld and toward the first end in the short direction Wd. The first dummy portion **83** has an elliptical shape when viewed from the thickness direction Td. A second dummy portion **84** is provided at a corner toward the first end in the longitudinal direction Ld and toward the second end in the short direction Wd. The second dummy portion **84** has the same rectangular shape as the first external terminal **81** and the second external terminal **82** when viewed from the thickness direction Td.

The first dummy portion **83** and the second dummy portion **84** are disposed at the two-fold symmetrical positions with respect to the geometric center G of the main face MF. The shape of the first dummy portion **83** is different from those of the first external terminal **81**, the second external terminal **82**, and the second dummy portion **84**.

In the example illustrated in FIG. **24**, it is assumed that the main face MF is divided into four imaginary regions by a first imaginary straight line VL**1** passing through the center of the main face MF in the longitudinal direction Ld and parallel to the short direction Wd and a second imaginary straight line VL**2** passing through the center of the main face MF in the short direction Wd and parallel to the longitudinal direction Ld. One terminal portion **80** is provided in each of the four imaginary regions.

Specifically, an imaginary region toward the first end in the longitudinal direction Ld relative to the first imaginary straight line VL**1** and toward the second end in the short direction Wd relative to the second imaginary straight line VL**2** is defined as the first imaginary region VA**1**. The second dummy portion **84** is provided in the first imaginary region VA**1**. An imaginary region toward the second end in the longitudinal direction relative to the first imaginary straight line VL**1** and toward the second end in the short direction Wd relative to the second imaginary straight line VL**2** is defined as the second imaginary region VA**2**. The first external terminal **81** is provided in the third imaginary region VA**3**. An imaginary region toward the first end in the longitudinal direction Ld relative to the first imaginary straight line VL**1** and toward the first end in the short direction Wd relative to the second imaginary straight line VL**2** is defined as the third imaginary region VA**3**. The first external terminal **81** is provided in the third imaginary region VA**3**. An imaginary region toward the second end in the longitudinal direction Ld relative to the first imaginary straight line VL**1** and toward the first end in the short direction Wd relative to the second imaginary straight line VL**2** is defined as the fourth imaginary region VA**4**. The first dummy portion **83** is provided in the fourth imaginary region VA**4**. That is, in the example illustrated in FIG. **24**, the specific dummy portion **83**S is the first dummy portion **83**, and the specific terminal portion **80**S is the second dummy portion **84**.

As in the example illustrated in FIG. **24**, when the first dummy portion **83** and the second dummy portion **84** are disposed symmetrically, when the shape of the first dummy portion **83** is different from the shapes of the other terminal portions **80**, it is easy to identify the orientation of the inductor component.

In the example illustrated in FIG. **24**, the shape of the specific dummy portion **83**S may be any shape as long as it is different from the shape of the specific terminal portion **80**S. When the shape of the specific dummy portion **83**S and the shape of the specific terminal portion **80**S are both quadrangular shapes, the shape of the specific dummy portion **83**S is different from the shape of the specific terminal portion **80**S as long as one is a square and the other is a rectangle. In addition, when the shape of the specific dummy portion **83**S and the shape of the specific terminal portion **80**S are similar to each other, the shape of the specific dummy portion **83**S is different from the shape of the specific terminal portion **80**S as long as the dimensions thereof are different to an extent that they can be distinguished from each other in appearance.

In the above embodiment, the connection portion **33** may not be provided in the second inductor wire **20**L. The connection portion **33** may have a shape in which the long straight portion **31** and the short straight portion **32** are connected at a right angle and in a bent manner.

The two pads of the second inductor wire **20**L may not be disposed at symmetrical positions with respect to the geometric center G of the element body BD. When the first inductor wire **20**R and the second inductor wire **20**L are disposed in a row and the pads are also disposed in a row, the inductor component is long in one direction. The position of each pad in the example of the above embodiment may be changed so that the inductor component has a shape suitable for mounting.

In the above embodiment, the central axis line A**1** of the first support wire **41** and the central axis line A**2** of the second support wire **42** may not coincide with each other. The arrangement of the support wires can be appropriately changed according to the shapes and the like of the first pads **22**R and **22**L and the second pad **23**R.

In the above embodiment, the first wiring body **21**R and the second wiring body **21**L may have different sectional areas, and the first wiring body **21**R and the second wiring body **21**L may have different dimensions in the wiring width and the thickness direction Td. As long as the first wiring body **21**R and the second wiring body **21**L have different sectional areas, the inductance values may be different when the wiring lengths thereof are the same.

In the above embodiment, the inductance values of the first wiring body **21**R and the second wiring body **21**L are not limited to those of the example of the above embodiment. For example, the first wiring body **21**R and the second wiring body **21**L may have the same wiring length, and the first inductor wire **20**R and the second inductor wire **20**L may have the same inductance ratio.

In the above embodiment, the position of the first support wire **41** is not limited to the example of the above embodiment. For example, the position of the central axis line A**1** of the first support wire **41** in the short direction Wd may be the same as the position of the central axis line of the connected wiring body in the short direction Wd. When the wiring body has a connected portion, the central axis line A**1** of the first support wire **41** may be shifted from the central axis line of the linear portion as long as the end of the wiring body toward the pad is linear.

In the above embodiment, the number of support wires exposed from the first side face **91** and the second side face **92** may be three or more according to the number of inductor wires, or all may be omitted.

In the above embodiment, the average grain diameter of the metal magnetic powder contained in the magnetic layer **50** is not limited to the example of the above embodiment.

However, in order to ensure the relative permeability, the average grain diameter of the metal magnetic powder is preferably one micrometer or more and 10 micrometers or less (i.e., from one micrometer to 10 micrometers).

In the above embodiment, the metal magnetic powder contained in the first magnetic layer **54** and the second magnetic layer **55** may not be the metal magnetic powder containing Fe. The metal magnetic powder may be a metal magnetic powder containing FeNi or FeSiCr.

In the above embodiment, the interval between the parallel portions is preferably 50 μm or more from the viewpoint of suppressing the disturbance of the magnetic flux generated between the wires. When it is less than 50 micrometers, it is preferable to dispose an insulation resin or an insulating inorganic substance between the inductor wires from the above viewpoint.

In the above embodiment, the pitch X**1**, the first distance Y**1**, and the second distance Y**2** may be equal, or the first distance Y**1** and the second distance Y**2** may be larger than the pitch X**1**. The first distance Y**1** and the second distance Y**2** may be different from each other.

Also, in the above embodiment, the respective ratios of each pitch, the first distance Y**1**, and the second distance to the average value of each pitch, the first distance Y**1**, and the second distance Y**2** may be less than 50% or more than 150%.

The shapes of the wiring bodies **21**R and **21**L in the first inductor wire **20**R and the second inductor wire **20**L are not limited to the example of the above embodiment as long as the number of turns is 0.5 turns or less. For example, the wiring bodies **21**R and **21**L may have a wave shape or a meander shape. When the wiring bodies **21**R and **21**L have a meander shape, the pitch between the portions extending linearly from the first pads **22**R and **22**L among the two different wiring bodies **21**R and **21**L is a pitch of the first inductor wire **20**R and the second inductor wire **20**L.

In the above embodiment, the dimension of the element body BD in the thickness direction Td is not limited to the example of the above embodiment. However, as described above, the smaller the dimension of the element body BD in the thickness direction Td, the smaller the dimension protruding from the substrate when the inductor component **10** is mounted on the substrate, which is preferable. Specifically, the dimension is preferably 0.25 mm or less.

In the above embodiment, the dimension of the first layer L**1**, that is, the first inductor wire **20**R and the second inductor wire **20**L, in the thickness direction Td is not limited to the example of the above embodiment. However, as described above, the dimension is preferably one-tenth or more and one-third or less (i.e., from one-tenth to one-third) of the dimension of the element body BD in the thickness direction Td.

In the above embodiment, the pitch P**1** from the central axis line A**1** of the first support wire **41** extending from the first inductor wire **20**R to the central axis line A**1** of the first support wire **41** extending from the second inductor wire **20**L is not limited to the example of the above embodiment. For example, the configuration may be such that the pitch P**1**, the distance Q**1**, and the distance Q**2** are equal.

In the above embodiment, the composition of the first inductor wire **20**R and the second inductor wire **20**L is not limited to the example of the above embodiment. For example, silver or gold may be used.

In the above embodiment, the composition of the magnetic layer **50** is not limited to the example of the above embodiment. For example, the magnetic layer **50** may be made of ferrite powder or a mixture of a ferrite powder and a metal magnetic powder.

In the above embodiment, another layer may be interposed between each of the support wires **41** and **42** and the magnetic layer **50**. For example, an insulation layer may be interposed between each of the support wires **41** and **42** and the magnetic layer **50**.

In the above embodiment, the number of inductor wires extending in the element body BD may be one.

In the above embodiment, the areas of the first pads **22**R and **22**L and the second pad **23**R may be equal to the areas of the first vertical wires **71** and the second vertical wires **72**, respectively, when viewed from the thickness direction Td. In addition, the length dimensions of the first pads **22**R and **22**L and the second pad **23**R in the direction orthogonal to the extension direction of the wiring bodies **21**R and **21**L may be the same as that of each of the wiring bodies **21**R and **21**L.

In the above embodiment, when viewed from the thickness direction Td, the terminal portions **80** may be disposed in the respective imaginary regions one by one, and the terminal portions **80** may not be disposed at the two-fold symmetrical positions with respect to the geometric center G. When the specific terminal portion **80**S and the specific dummy portion **83**S are not at the two-fold symmetrical positions, when the specific terminal portion **80**S and the specific dummy portion **83**S are disposed in an imaginary region which is located at the two-fold symmetrical positions, it can be said that the specific terminal portion **80**S and the specific dummy portion **83**S are disposed substantially symmetrically. Therefore, in this example, there may be a problem that it is difficult to identify the orientation of the inductor component **10**. Therefore, by adopting the configuration related to the shape of the specific dummy portion **83**S described above, the orientation of the inductor component **10** can be easily identified.

The manner of division when dividing the main face MF of the element body BD into the imaginary regions can be appropriately changed. For example, depending on the arrangement of the terminal portions **80**, the main face MF may be divided into four imaginary regions by two diagonals, or may be equally divided such that four imaginary regions are disposed side by side in the longitudinal direction Ld. That is, it is sufficient to employ the manner of division in which the respective imaginary regions are congruent and the one terminal portion **80** is disposed in one imaginary region.

In the above embodiment, the metal layers of the external terminals **81** and **82** may be omitted, and the portions where the first vertical wires **71** and the second vertical wires **72** are exposed from the main face MF may function as the external terminals **81** and **82**. In this case, a current can flow from the first vertical wire **71** and the second vertical wire **72** directly to the first inductor wire **20**R and the second inductor wire **20**L.

In the above embodiment, the outer faces of the first external terminal **81** and the second external terminal **82** may be covered with an insulation layer. In this case, in a state where the inductor component **10** before being mounted on a substrate or the like is stored, it is possible to prevent an unintended current from flowing inside the inductor component **10** through each external terminal. In the case of this modification example, before the inductor component **10** is mounted on a substrate or the like, cleaning or the like may be performed to remove the insulation layer covering the first external terminal **81** and the second external terminal **82**.

In the above embodiment, the metal layer of the terminal portion **80** is not limited to the first metal layer **111**, the second metal layer **112**, and the third metal layer **113** of the above embodiment. In addition, a catalyst layer may be provided as necessary. For example, gold or tin can ensure solder wettability, nickel can suppress electromigration, and the metal layers of the external terminals **81** and **82** can be appropriately set according to each function. In addition, the dummy portion **83** and the first external terminal **81** and the second external terminal **82** may have different laminated structures.

Furthermore, the material of the dummy portion **83** may not be a material having conductivity. For example, a portion where the second magnetic layer **55** is exposed from the insulation layer **90** may be the dummy portion **83**. As described above, when the dummy portion **83** is not made of a conductive material, there is no particular problem since the dummy portion **83** itself is not electrically connected to each inductor wire.

In the above embodiment, the area of the dummy portion **83** when viewed from the thickness direction Td may be different from the areas of the first external terminal **81** and the second external terminal **82**.

In the above embodiment, the dummy portion may be provided in the first region. In the example of the above embodiment, in a case where the dummy portion is added to the first region, the terminal portions **80** may be disposed one by one in the respective imaginary regions by adding the dummy portion to the second region. In this case, the number of dummy portions may be larger than the number of external terminals in the second region of the imaginary straight line BX. The imaginary straight line BX may be drawn parallel to the longitudinal direction Ld.

In the above embodiment, when viewed from the thickness direction Td, the dummy portion **83** may not be on the inductor wire. As long as the terminal portions **80** are disposed one by one in the respective imaginary regions, the arrangement of the dummy portions **83** may be appropriately changed so as not to protrude out of the imaginary region.

In the above embodiment, in the dummy portion **83**, the area having the same color as the external terminal may be less than half, or the color may be different from that of the external terminal in the whole region of the dummy portion **83**.

In the above embodiment, the surface roughness of the first external terminal **81** and the second external terminal **82** may be substantially constant over the whole region.

In the above embodiment, the smooth portion **121** may not be provided on the vertical wires **71** and **72** of the first external terminal **81** and the second external terminal **82**. That is, when viewed from the thickness direction Td, the smooth portion **121** may be shifted from the vertical wire. In a portion, of the first external terminal **81** and the second external terminal **82**, which is not positioned on the vertical wire, the surfaces of the first external terminal **81** and the surface of the second external terminal **82** may be smoothed.

In the above embodiment, the recesses **120** may not be provided in the first external terminal **81** and the second external terminal **82**. In addition, the recesses **120** provided in the first external terminal **81** and the second external terminal **82** may be provided at positions deviated from the vertical wires **71** and **72** when viewed from the thickness direction Td.

In the above embodiment, the material of a portion including the exposed face **41**A of the first support wire **41** and a portion including the exposed face **42**A of the second support wire **42** may not be a Cu oxide. When a Cu alloy is used as the first support wire **41** and the second support wire **42**, it is preferable to employ a Cu alloy oxide as a material of a portion including each exposed face. Further, a resin insulation layer may be laminated on the exposed face **41**A of the first support wire **41** and the exposed face **42**A of the second support wire **42**.

In the above embodiment, the material of the first support wire **41** and the second support wire **42** may be directly exposed from the respective exposed faces **41**A.

The area of the exposed face **41**A of the first support wire **41** may be equal to the sectional area of the first support wire **41** inside the element body BD by a method of cutting with a dicing machine or a process after cutting with a dicing machine. For example, when the first side face **91** including the exposed face **41**A is polished after cutting with a dicing machine, the shape of the exposed face **41**A is the same as the sectional shape of the first support wire **41** inside the element body BD, and thus, the sectional areas of them are the same. The same applies to the second support wire **42**.

In the above embodiment, the method of manufacturing the inductor component **10** is not limited to the example of the above embodiment. For example, in the first embodiment and the second embodiment, the step of forming the first inductor wire **20**R and the second inductor wire **20**L and the step of forming the first support wire **41** and the second support wire may be different. For example, after the first inductor wire **20**R and the second inductor wire **20**L are formed, the support wires **41** and **42** may be formed of a material different from that of the first inductor wire **20**R.

What is claimed is:

1. An inductor component comprising:

an element body having a main face;

an inductor wire extending in parallel with the main face with a number of turns being 0.5 turns or less in the element body;

a vertical wire extending in a thickness direction from the inductor wire toward the main face and connected to the inductor wire; and

a plurality of terminal portions exposed from the main face,

wherein

at least one of the plurality of terminal portions is an external terminal that is electrically connected to the inductor wire;

each of other of the terminal portions other than the external terminal among the plurality of terminal portions is a dummy portion that is not electrically connected to the inductor wire;

when viewed from the thickness direction, the main face has a two-fold symmetrical shape with respect to a geometric center of the main face;

when the main face is divided into a plurality of mutually congruent imaginary regions, a number of the imaginary regions being equal to a number of the terminal portions when viewed from the thickness direction:

the terminal portion is disposed in each of the imaginary regions;

when one of the dummy portions is defined as a specific dummy portion and the terminal portion, which is provided in the imaginary region at a two-fold symmetrical position about the geometric center with respect to the imaginary region in which the specific dummy portion is provided, is defined as a specific terminal portion,

a shape of the specific dummy portion is different from a shape of the specific terminal portion;

the vertical wire includes a first vertical wire and a second vertical wire;

the inductor wire includes a wiring body that extends linearly, a first pad that is provided at a first end of the wiring body and to which the first vertical wire is connected, and a second pad that is provided at a second end of the wiring body and to which the second vertical wire is connected;

the inductor wire includes a plurality of the inductor wires;

when one of the plurality of inductor wires is defined as a first inductor wire and another of the plurality of inductor wires is defined as a second inductor wire,

one of the first pad and the second pad in the first inductor wire is identical to one of the first pad and the second pad in the second inductor wire;

the wiring body of the first inductor wire extends linearly, and

the second inductor wire includes two straight portions extending in different directions and a connection portion connecting the two straight portions.

2. The inductor component according to claim **1**, wherein

the plurality of terminal portions is disposed at two-fold symmetrical positions with respect to the geometric center of the main face, and

the dummy portion is disposed at a position that is not two-fold symmetric with respect to the geometric center of the main face.

3. The inductor component according to claim **2**, wherein

the dummy portion includes a plurality of the dummy portions, and at least one of the plurality of dummy portions has a shape different from shapes of other of the dummy portions.

4. The inductor component according to claim **1**, wherein

the main face has a quadrangular shape; and

when an imaginary straight line passing through the geometric center of the main face and parallel to one side of the main face is drawn, and the main face is imaginarily divided into a first region and a second region,

the dummy portion is not provided in the first region.

5. The inductor component according to claim **4**, wherein

the dummy portions, whose number is equal to or larger than a number of the external terminals in the second region are provided in the second region.

6. The inductor component according to claim **1**, wherein

the plurality of terminal portions is disposed at two-fold symmetrical positions with respect to the geometric center of the main face;

the dummy portions include a first dummy portion and a second dummy portion that are disposed at two-fold symmetrical positions with respect to the geometric center of the main face; and

the specific dummy portion is the first dummy portion, and the specific terminal portion is the second dummy portion.

7. The inductor component according to claim **1**, wherein

an area of the dummy portion is equal to an area of the external terminal when viewed from the thickness direction.

8. The inductor component according to claim **1**, wherein

at least part of the dummy portion overlaps the inductor wire when viewed from the thickness direction.

9. The inductor component according to claim **1**, wherein

the external terminal includes a plurality of the external terminals,

the dummy portion includes a plurality of the dummy portions, and

a number of the dummy portions is smaller than a number of the external terminals.

10. The inductor component according to claim **1**, wherein

the vertical wire includes a first vertical wire and a second vertical wire;

the inductor wire includes a wiring body that extends linearly, a first pad that is provided at a first end of the wiring body and to which the first vertical wire is connected, and a second pad that is provided at a second end of the wiring body and to which the second vertical wire is connected;

the wiring body includes a plurality of the wiring bodies; and

a number of the terminal portions is four or more.

11. The inductor component according to claim **1**, wherein

the terminal portion includes a plurality of conductive layers.

12. The inductor component according to claim **1**, wherein

half or more of the external terminals have an optically same color as the dummy portion when viewed from the thickness direction.

13. An inductor component comprising:

an element body having a main face;

an inductor wire extending in parallel with the main face with a number of turns being 0.5 turns or less in the element body;

a vertical wire extending in a thickness direction from the inductor wire toward the main face and connected to the inductor wire; and

a plurality of terminal portions exposed from the main face,

wherein

at least one of the plurality of terminal portions is an external terminal that is electrically connected to the inductor wire;

each of other of the terminal portions other than the external terminal among the plurality of terminal portions is a dummy portion that is not electrically connected to the inductor wire;

when viewed from the thickness direction, the main face has a two-fold symmetrical shape with respect to a geometric center of the main face;

when the main face is divided into a plurality of mutually congruent imaginary regions, a number of the imaginary regions being equal to a number of the terminal portions when viewed from the thickness direction:

the terminal portion is disposed in each of the imaginary regions;

when one of the dummy portions is defined as a specific dummy portion and the terminal portion, which is provided in the imaginary region at a two-fold symmetrical position about the geometric center with respect to the imaginary region in which the specific dummy portion is provided, is defined as a specific terminal portion, a shape of the specific dummy portion is different from a shape of the specific terminal portion;

a surface of the external terminal includes a smooth portion and a rough portion having a surface roughness larger than a surface roughness of the smooth portion; and

a surface of the dummy portion has a surface roughness larger than the surface roughness of the smooth portion.

14. The inductor component according to claim **13**, wherein

the smooth portion is disposed on the vertical wire.

15. The inductor component according to claim **1**, wherein

the external terminal has a recess recessed in the thickness direction.

16. The inductor component according to claim **15**, wherein

the recess is disposed on the vertical wire.

17. An inductor component comprising:

an element body having a main face;

an inductor wire extending in parallel with the main face with a number of turns being 0.5 turns or less in the element body;

a vertical wire extending in a thickness direction from the inductor wire toward the main face and connected to the inductor wire; and

a plurality of terminal portions exposed from the main face,

wherein

at least one of the plurality of terminal portions is an external terminal that is electrically connected to the inductor wire;

each of other of the terminal portions other than the external terminal among the plurality of terminal portions is a dummy portion that is not electrically connected to the inductor wire;

when viewed from the thickness direction, the main face has a two-fold symmetrical shape with respect to a geometric center of the main face;

when the main face is divided into a plurality of mutually congruent imaginary regions, a number of the imaginary regions being equal to a number of the terminal portions when viewed from the thickness direction:

the terminal portion is disposed in each of the imaginary regions;

when one of the dummy portions is defined as a specific dummy portion and the terminal portion, which is provided in the imaginary region at a two-fold symmetrical position about the geometric center with respect to the imaginary region in which the specific dummy portion is provided, is defined as a specific terminal portion,

a shape of the specific dummy portion is different from a shape of the specific terminal portion;

the element body includes a magnetic layer covering the inductor wire and an insulation layer laminated on the magnetic layer;

an outer face of the insulation layer constitutes the main face; and

the dummy portion is disposed on the magnetic layer and is in contact with the insulation layer.

18. An inductor component comprising:

an element body having a main face;

an inductor wire extending in parallel with the main face with a number of turns being 0.5 turns or less in the element body;

a vertical wire extending in a thickness direction from the inductor wire toward the main face and connected to the inductor wire; and

a plurality of terminal portions exposed from the main face,

wherein

at least one of the plurality of terminal portions is an external terminal that is electrically connected to the inductor wire;

each of other of the terminal portions other than the external terminal among the plurality of terminal portions is a dummy portion that is not electrically connected to the inductor wire;

when viewed from the thickness direction, the main face has a two-fold symmetrical shape with respect to a geometric center of the main face;

when the main face is divided into a plurality of mutually congruent imaginary regions, a number of the imaginary regions being equal to a number of the terminal portions when viewed from the thickness direction:

the terminal portion is disposed in each of the imaginary regions;

when one of the dummy portions is defined as a specific dummy portion and the terminal portion, which is provided in the imaginary region at a two-fold symmetrical position about the geometric center with respect to the imaginary region in which the specific dummy portion is provided, is defined as a specific terminal portion,

a shape of the specific dummy portion is different from a shape of the specific terminal portion;

the element body includes a magnetic layer covering the inductor wire and an insulation layer laminated on the magnetic layer;

an outer face of the insulation layer constitutes the main face; and

the dummy portion is a portion where the magnetic layer is exposed from the insulation layer.

19. The inductor component according to claim **1**, wherein

at least part of the dummy portion overlaps the connection portion when viewed from the thickness direction.

20. The inductor component according to claim **1**, wherein

each respective one of the terminal portions, including the dummy portion, does not overlap into multiple of the imaginary regions.

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