Advisory Opinion

Advisory Opinion No. 2015-600026

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The case of advisory opinion on the technical scope of a patent invention for Patent No. 4082709 between the parties above is stated and concluded as follows.

Conclusion

The "spacer" indicated in the Drawings and photograph of Article A falls within the technical scope of the invention relating to Claims 1, 2, 3, 6, and 8 of Patent No. 4082709.

Reason

No. 1 Object of the demand

The object of the demand for the advisory opinion is to demand the advisory opinion that the "spacer" indicated in the Drawings and photograph of Article A (hereinafter, referred to as "Article A") falls within the technical scope of the invention (hereinafter, referred to as the "patent invention 1" and the like, generically referred to as the "patent invention") relating to Claims 1, 2, 3, 6, and 8 of the scope of claims for patent in Patent No. 4082709 (hereinafter, referred to as the "Patent").

No. 2 The patent invention

The invention relating to Claims 1, 2, 3, 6, and 8 of the scope of claims for patent in Patent No. 4082709 is specified by matters described in Claims 1, 2, 3, 6, and 8 of the scope of claims for patent as follows (in the body, the invention is separately described in relation to each constituent component, and codes A to J are added; hereinafter, referred to as the "constituent component A" and the like).

"[Claim 1]

E A spacer for rebars

A which is rotatably installed to one rebar and maintains an interval between the rebar and a mold comprising:

B a rebar fitting portion which is formed in a generally U-shape and installed to the rebar; and

C a plurality of positioning protrusions which are radially and protrusively provided on an outer periphery of the rebar fitting portion and abut on a surface of the mold at tip ends;

D wherein the plurality of positioning protrusions are formed to make covering depth of the rebar always equal when two optional adjacent positioning protrusions of the plurality of positioning protrusions are made to abut on the mold.

[Claim 2]

F The spacer for rebars according to Claim 1, wherein distances between a center of the rebar installed to the rebar fitting portion and tip ends of the positioning protrusions are equal.

[Claim 3]

G The spacer for rebars according to Claim 1 or Claim 2, which has a fitting reinforcing portion formed on the outer periphery of the rebar fitting portion, wherein the positioning protrusions are raised on an outer periphery of the fitting reinforcing portion at equal angle intervals.

[Claim 6]

H The spacer for rebars according to any one of Claims 1-5, wherein the tip ends of the positioning protrusions are formed in a generally spherical shape or a generally conical shape.

[Claim 8]

I The spacer for rebars according to any one of Claims 1-7, wherein the positioning protrusions are formed in a flat shape with thin width on the tip end side and wide width on a root side."

No. 3 Article A

1 The demandant's allegation

The demandant, in the advisory opinion request, in conformity with the patent inventions 1, 2, 3, and 6, specifies Article A as follows.

"a: A spacer for rebars which is installed to one rebar and maintains an interval between a rebar and a mold comprising:

b: a rebar fitting portion (100) which is installed to the rebar;

c: six positioning protrusions (200) which are radially and protrusively provided on an outer periphery of the rebar fitting portion (100) and abut on a surface of the mold at tip ends; and

d: a generally C-shaped member (150) which is provided between the rebar fitting portion (100) and the positioning protrusions (200) so as to surround the rebar fitting portion (100),

e: wherein the six positioning protrusions (200) are formed so that covering depth when two optional adjacent positioning protrusions (200) are made to abut on the mold is always equal.",

"f: The spacer for rebars according to Claim 1,

e: wherein distances from a center of the rebar installed to the rebar fitting portion (100) to the tip ends of the positioning protrusions (200) are equal.",

"f1: The spacer for rebars according to Claim 1 or 2,

d: which has a C-shaped member (150) formed between the rebar fitting portion (100) and the positioning protrusions (200) so as to surround the rebar fitting portion (100),

g: wherein the positioning protrusions (200) are raised on an outer periphery of the member (150) at equal angle intervals", and

"f2: The spacer for rebars according to any one of Claims 1-3,

h: wherein the tip ends of the positioning protrusions (200) are formed in a

generally arc shape."

2 The demandee's allegation

The demandee, in the written reply to the advisory opinion request, specifies Article A and alleges as follows.

(1) Concerning a receiving surface which receives a part of an outer peripheral surface of the rebar in a rebar receiving portion (100') and curves in an arc-shape, a diameter of a virtual circle passing through the receiving surface is equal to a diameter of the rebar with the maximum diameter received by the receiving surface, and its center is provided at a position deviated downward from a center of a virtual circle (104) (a virtual circle to which the protrusive ends of the six positioning protrusions (200) are inscribed) passing through the tip ends of the six positioning protrusions (200) which are radially and protrusively provided from the outer periphery of the generally C-shaped member (150). Covering depth when two optional adjacent positioning protrusions (200) of the six positioning protrusions (200) are made to abut on the mold is formed to be always different, so that Article A obviously differs from the patent invention 1 in its technical configuration.

(2) A receiving surface (100a) of the rebar receiving portion (100') receives the rebar without fitting with the rebar.

(3) In the patent invention 1, although, considering a function and effect of the patent invention 1, it should be understood that a configuration "the positioning protrusions are protrusively provided on the outer periphery of the rebar fitting portion" intends either one of a configuration in which the positioning protrusions are directly and protrusively provided on the outer periphery of the rebar fitting portion, or a configuration in which the positioning protrusions are protrusively provided on the outer periphery of the rebar fitting portion, or a configuration in which the positioning protrusions are protrusively provided on the outer periphery of the rebar fitting portiod on the outer periphery of the rebar fitting portion through a member with a shape which does not hinder the filling property of concrete, the generally C-shaped member (150) of Article A is prone to hinder the flow of the concrete, so that the member does not correspond to the fitting reinforcing portion in the patent invention.

"a: A spacer for rebars which is installed to one rebar and maintains an interval between the rebar and a mold comprising:

b: a rebar receiving portion (100') which is equipped with a receiving surface receiving a part of an outer peripheral surface of the rebar and curved in an arc-shape, makes a diameter of a virtual circle passing through the receiving surface curved in the arc-shape equal to a diameter of the rebar with the maximum diameter received by

the receiving surface, and provides its center at a position deviated downward from a center of a virtual circle (104) passing through tip ends of the six positioning protrusions mentioned below;

d: a generally C-shaped member (150) which includes frame portions (150-1) protrusively provided outward on an outer periphery of the rebar receiving portion (100'), an outer ring portion (150-2) coupling tip ends of the frame portions, and a rib (150-3); and

c: a plurality of positioning protrusions (200) which are radially and protrusively provided on an outer periphery of the generally C-shaped member (150) and abut on a surface of the mold at tip ends,

e: wherein the six positioning protrusions (200) are formed to always differ covering depth of the rebar when two optional adjacent positioning protrusions (200) of the six positioning (200) are made to abut on the mold."

3 Specifications of Article A

(1) Submitted document and descriptions of evidences

A In Evidence A No. 3 (the commodity catalog of the demandee) and Evidence A No.

4 (the copy of the advertisement appeared in the home page of the demandee), advantages or features of Article A are described as follows.

(A) "Triple claws for catching rebars enables multiple use for 3 sizes of rebars D10-16."

(B) "The simplest shape improving concrete filling efficiency, maintains stable and optimal covering."

(C) "Rough frame material included in concrete material can easily pass, and it is possible to be laterally used for rebars."

Also, from a list described in Evidence A No. 3 and Evidence A No. 4, it can be grasped that there are four kinds of "D10-16×40", "D10-16×50", "D10-16×60", and "D10-16×70", as the size of Article A, and "the covering depth" of each size is 40 mm, 50 mm, 60 mm, and 70 mm.

B In Evidence A No. 6 (the Drawings of Article A), "multiple use for D10-16" is described.

C According A and B mentioned above, it can be recognized that Article A is used for 3 sizes of rebars D10-16, and maintains a stable covering of 40 mm, 50 mm, 60 mm, or 70 mm.

D With reference to the descriptions of A (A) mentioned above, when viewing Fig. indicating a testing method in Evidence A No. 5 (a test result list of Article A), it can be seen that the rebar is supported by the receiving surface curved in the arc-shape and the claws for catching the rebar. In view of a supporting structure of the rebar, it is recognized that the rebar is rotatably installed.

E According to the allegation of the demandee in the written reply to the advisory opinion request, Article A makes the diameter of the virtual circle passing through the receiving surface (100a) curved in the arc-shape of the rebar receiving portion (100') equal to the diameter of the rebar with the maximum diameter received by the receiving surface (100a), and provides its center at the position deviated downward from the center of the virtual circle(104) passing through the tip ends of the six positioning protrusions (200).

With reference to the allegation above, if the rebar with the maximum diameter is received by the rebar receiving portion (100'), it can be recognized that a center of the rebar is deviated downward from the center of the virtual circle (104) passing through the tip ends of the positioning protrusions.

(2) Article A

Including the recognition matters in (1), considering the descriptions of the advisory opinion request, Evidence A No. 3, Evidence A No. 4, Evidence A No. 5, Evidence A No. 6, and Evidence A No. 7 (the photograph of Article A) attached to the advisory opinion request, and the written reply to the advisory opinion and Evidence B No. 1 (the Drawings of Article A) attached to the written reply to the advisory opinion, it is reasonable that Article A is made from the configurations of a-i below (hereinafter, the separately described configuration is referred to as "Configuration a" and the like.). Also, codes in the Drawings of Article A attached to the written reply to the advisory opinion are adopted.

"e A spacer for rebars

a which is rotatably installed to one rebar and maintains an interval between the rebar and the mold comprising:

b a rebar receiving portion (100') which is equipped with a receiving surface (100a) receiving a part of an outer peripheral surface of the rebar and curved in an arc shape, makes a diameter of a virtual circle passing through the receiving surface

(100a) curved in the arc shape equal to a diameter of a rebar with the maximum diameter received by the receiving surface (100a), and provides its center at a position deviated downward from a center of a virtual circle (104) passing through tip ends of six positioning protrusions mentioned below;

g1 a generally C-shaped member (150) which includes a frame portion (150-1) protrusively provided outward on an outer periphery of the rebar receiving portion (100'), an outer ring portion (150-2) coupling tip ends of the frame portion, and a rib (150-3); and

c six positioning protrusions (200) which are radially and protrusively provided on an outer periphery of the generally C-shaped member (150) and abut on a surface of the mold at tip ends,

d wherein when the spacer for rebars is used for 3 sizes of rebars D10-16, and the rebar D16 with the maximum diameter is received by the rebar receiving portion (100'), a center of the rebar is deviated downward from a center of a virtual circle (104) passing through tip ends of the positioning protrusions, and the six positioning protrusions (200), when two optional adjacent positioning protrusions (200) of the six positioning protrusions (200) are made to abut on the mold, are formed so as to maintain a stable covering of 40 mm, 50 mm, 60 mm, or 70 mm;

g2 the positioning protrusions (200) are raised on the outer periphery of the generally C-shaped member (150) at equal angle intervals;

h the tip ends of the positioning protrusions (200) are formed in a generally arc shape; and

i the positioning protrusions (200) are formed in a flat shape with thin width on the tip end side and wide width on a root side."

No. 4 Examination of a belonging property

1 The constituent components A and E

It is obvious that Configurations a and e of Article A respectively correspond to the constituent components A and E of the patent invention, so that Article A satisfies the constituent components A and E of the patent invention.

2 The constituent component B

(1) First, we will examine "a rebar receiving portion (100')" in Configuration b of Article A and "a rebar fitting portion" in the constituent component B of the patent invention.

In the light of the fact that a meaning of a term "fitting" is not specially defined

in detailed description of the invention in the specification of the Patent, and that a meaning of "fitting (hameai)" is described as "a word indicating a relationship in which a shaft is securely fitted in a hole or loosely fitted so as to slide. Engagement." in Kojien (6th Edition), it can be said that "a rebar receiving portion (100')" "receiving a part of an outer peripheral surface of the rebar" and "which makes a diameter of a virtual circle passing through the receiving surface (100a) curved in the arc-shape equal to a diameter of the rebar with the maximum diameter received by the receiving surface (100a)" is loosely fitted with the rebar so as to slide, so that "a rebar receiving portion (100')" corresponds to "a rebar fitting portion which is installed to the rebar" in the constituent component B of the patent invention.

(2) Next, we will examine a shape of "a receiving surface (100a)" in Configuration b of Article A and a shape of "a rebar fitting portion" in the constituent component B of the patent invention. The shape of "a receiving surface (100a)" in Configuration b of Article A is "an arc shape", whereas the shape of "a rebar fitting portion" in the constituent component B of the patent invention is "a generally U-shape". Although they are similar in a point having an arc-shaped part, it can be thought that their shapes are roughly different.

However, both of them have a technical significance that the rebar is fitted by the arc-shaped part, and "the arc shape" can be also said as being "the generally U-shape", so that their shapes are substantially not different.

(3) Therefore, Article A satisfies the constituent component B of the patent invention.

3 The constituent component C

(1) "Six positioning protrusions (200) which are radially and protrusively provided and abuts on a surface of the mold at tip ends" in Configuration c of Article A corresponds to "a plurality of positioning protrusions which is radially and protrusively provided and abuts on a surface of the mold at tip ends" in the constituent component C of the patent invention.

(2) Next, concerning a protrusively provided position of the positioning protrusions, we will examine whether or not "protrusively provided" on "an outer periphery of the generally C-shaped member (150)" in Configuration c of Article A corresponds to "protrusively provided" on "an outer periphery of the rebar fitting portion" in the constituent component C of the patent invention.

In the light of the fact that the patent invention 3 specifies "has a fitting reinforcing portion formed on an outer periphery of the rebar fitting portion, wherein the positioning protrusions are raised on an outer periphery of the fitting reinforcing portion at equal angle intervals"; all embodiments described in the detailed description of the invention in the specification of the Patent are formed with the fitting reinforcing portion on the outer periphery of the fitting reinforcing portion; and raise the positioning protrusions on the outer periphery of the fitting reinforcing portion; and a meaning of "an outer periphery" is described as "a part or a zone surrounding the outside of an article" in Kojien (6th Edition), it can be understood that being "protrusively provided" on "an outer periphery of the rebar fitting portion" in the constituent component C of the patent invention 1 includes being protrusively provided so as to surround the outside of the rebar fitting portion, while interposing another member between the rebar fitting portion and the positioning protrusions, in addition to being directly and protrusively provided on the outside of the rebar fitting portion.

Therefore, according to Configuration g1 and Configuration c of Article A, "protrusions (200)" are "protrusively provided" on "an outer periphery" of "a generally C-shaped member (150) which includes frame portions (150-1) protrusively provided outward on an outer periphery of the rebar receiving portion (100'), an outer ring portion (150-2) coupling tip ends of the frame portions, and a rib (150-3)", so that it can be said that "protrusions (200)" of Article A are "protrusively provided" on "an outer periphery of the rebar receiving portion (100')" (through "the generally Cshaped member (150)"). Namely, "protrusively provided" on "an outer periphery of the generally C-shaped member (150)" in Configuration c of Article A corresponds to "protrusively provided" on "an outer periphery of the rebar fitting portion" in the constituent component C of the patent invention.

(3) Therefore, Configuration c of Article A satisfies the constituent component C of the patent invention.

4 The constituent component D

(1) "The six positioning protrusions (200), when two optional adjacent positioning protrusions (200) of the six positioning protrusions (200) are made to abut on the mold" in Configuration d of Article A corresponds to "when the plurality of positioning protrusions which are radially and protrusively provided and abut on a surface of the mold at tip ends are made to abut on the mold" in the constituent

component D of the patent invention.

(2) Next, we will examine whether or not "when the spacer for rebars is used for 3 sizes of rebars D10-16, and the rebar D16 with the maximum diameter is received by the rebar receiving portion (100'), a center of the rebar is deviated downward from a center of a virtual circle (104) passing through tip ends of the positioning protrusions," and "are formed so as to maintain a stable covering of 40 mm, 50 mm, 60 mm, or 70 mm" in Configuration d of Article A satisfies "is formed to make covering depth of the rebar always equal" in the constituent component D of the patent invention.

In the light of the fact that Article A "is formed so as to maintain a stable covering" to "3 sized of rebars D10-16", namely, each of the rebars D10 (a diameter 10 mm), D13 (a diameter 13 mm), and D16 (a diameter 16 mm), it is self-evident for a person skilled in the art that Article A is formed so as to match the center of the rebar and the center of "the virtual circle (104)", when the rebar D13 of the middle size is received by "the receiving surface (100a)", namely, if used for the rebar D13 of the middle size, Article A is formed so as to make covering depth when the optional adjacent two positioning protrusions (200) of the six positioning protrusions (200) are made to abut on the mold, always equal.

With reference to the examination above, if Article A is used for the rebar D10 or D16, the center of the rebar is deviated upward or downward from the center of "the virtual circle (104)" by 1.5 mm, so that it can be said that although a difference of the maximum 1.5 mm is generated on covering depth when the two optional adjacent positioning protrusions (200) of the six positioning protrusions (200) are made to abut on the mold, the difference in the covering depth is sufficiently small to a covering depth of 40 mm-70 mm of the rebars.

Therefore, it can be said that Article A is formed so as to make the covering depth when the two optional adjacent positioning protrusions (200) of the six positioning protrusions (200) are made to abut on the mold, substantially always equal, even if used for the rebar D10 or D16.

(3) Therefore, "when the spacer for rebars is used for 3 sizes of rebars D10-16 and the rebar D16 with the maximum diameter is received by the rebar receiving portion (100'), a center of the rebar is deviated downward from a center of a virtual circle (104) passing through tip ends of the positioning protrusions," and "are formed so as to maintain a stable covering of 40 mm, 50 mm, 60 mm, or 70 mm" in Configuration

d of Article A satisfies "is formed to make covering depth of the rebar always equal" in the constituent component D of the patent invention.

(4) Therefore, Configuration d of Article A satisfies the constituent component D of the present invention.

(5) Furthermore, although the demandee alleges, in the written reply to the advisory opinion request, that Article A is formed so as to always differ the covering depth of the rebar when two optional adjacent positioning protrusions (200) of the six positioning protrusions (200) are made to abut on the mold, and is obviously different from the patent invention 1 in its technical configuration, according to the examination above, the allegation of the demandee cannot be accepted.

5 The constituent component F

(1) In detailed description of the invention in the specification of the Patent, the technical significance of the constituent component F in the patent invention is described as follows.

"[0014] The spacer for rebars according to Claim 2 is the spacer for rebar according to Claim 1, and has a configuration in which a distance from a center of the rebar installed to the rebar fitting portion to each positioning protrusion is equal.

By this configuration, in addition to the function of Claim 1, the following function is provided.

(1) If the plurality of positioning protrusions are disposed on a circumference within the same plane surface, by rotating the spacer for rebars about the rebar, optional positioning protrusions are easily selected, and excellent workability is provided.

(2) Two positioning protrusions are contacted with the mold by using the rebar as a fulcrum to form a supporting triangle, so that excellent fixing stability is provided"

(2) As examined in 4, it is recognized that Article A matches the center of the rebar and the center of "the virtual circle (104)" if used for the rebar D13 of the middle size, and if used for the rebar D10 or D16, the center of the rebar is deviated upward or downward from the center of "the virtual circle (104)" by 1.5 mm.

However, the deviation amount of the center of the rebar to the center of "the virtual circle (104)" is sufficiently small as compared with overall dimensions of the

spacer for rebars of Article A, and does not cause a trouble in showing the function of the constituent F in the patent invention 2 mentioned in (A).

(3) Therefore, "when the spacer for rebars is used for 3 sizes of rebars D10-16 and the rebar D16 with the maximum diameter is received by the rebar receiving portion (100'), a center of the rebar is deviated downward from a center of a virtual circle (104) passing through tip ends of the positioning protrusions," and "are formed so as to maintain a stable covering of 40 mm, 50 mm, 60 mm, or 70 mm" in Configuration d of Article A corresponds to "is formed to make a distance from a center of the rebar installed to the rebar fitting portion to each positioning protrusion equal" in the constituent component F of the patent invention.

(4) Therefore, Configuration d of Article A satisfies the constituent component F of the patent invention.

6 The constituent component G

(1) It is obvious that "a generally C-shaped member (150) which includes a frame portion (150-1) protrusively provided outward on an outer periphery of the rebar receiving portion (100'), an outer ring portion (150-2) coupling tip ends of the frame portion, and a rib (150-3)" in Configuration g1 of Article A is a member which is formed on an outer periphery of "the rebar receiving portion (100')" and reinforces "the rebar receiving portion (100')", from its configuration.

(2) Therefore, "the positioning protrusions (200)" are "raised at equal angle intervals" on "the outer periphery" of "a generally C-shaped member (150) which includes a frame portion (150-1) protrusively provided outward on an outer periphery of the rebar receiving portion (100'), an outer ring portion (150-2) coupling tip ends of the frame portion, and a rib (150-3)" is a member which is formed on an outer periphery of "the rebar receiving portion (100')" and reinforces "the rebar receiving portion (100')" in Configuration g1 and Configuration g2 of Article A corresponds to "which has a fitting reinforcing portion formed on an outer periphery of the rebar fitting portion, wherein the positioning protrusions are raised on an outer periphery of the fitting reinforcing portion at equal angle intervals" in the constituent component G of the patent invention.

(3) Therefore, Configuration g1 and Configuration g2 of Article A satisfy the

constituent component G of the patent invention.

(4) Furthermore, the demandee, in the written reply to the advisory opinion request, alleges that the fitting reinforcing portion is assumed to have a shape which does not hinder the filling property of concrete, and that assuming such a shape, it should be understood to plan that the fitting reinforcing portion is provided on the outer periphery of the rebar fitting portion, and the positioning protrusions may be provided on an outer periphery of the fitting reinforcing portion.

However, the description "preferably, the shape of the fitting reinforcing portion is formed in a smooth flat shape without unevenness as far as possible." (Paragraph [0015]) in the specification of the Patent, does not eliminate a shape of "the generally C-shaped member (150)" in Configuration g1 of Article A, as a shape of the fitting reinforcing portion. In the light of the fact, Evidence A No. 3 and Evidence A No. 4, as advantages and features of Article A, describe "rough frame material included in concrete material can easily pass, and it is possible to be laterally used for rebars.", it can be recognized that "the generally C-shaped member (150)" of Article A is also a shape which does not hinder the filling property of concrete, so that the allegation of the demandee cannot be accepted.

7 The constituent components H and I

It is obvious that Configuration h and Configuration i of Article A correspond to the constituent component H and the constituent component I of the patent invention, so that Article A satisfies the constituent component H and the constituent component I of the patent invention.

8 Summary

Therefore, Article A satisfies the constituent components A-I.

No. 5 Closing

Consequently, Article A satisfies all of the constituent components A-I of the patent invention, so that Article A falls within the technical scope of the patent inventions 1, 2, 3, 6, and 8.

Therefore, the advisory opinion shall be made as described in the conclusion.

甲第6号証

イ号の図面



甲第6号証 Evidence A No. 6

イ号の図面 the Drawings of Article A

かぶり厚さ Covering depth

D10-16兼用 Multiple use for D10-16 正面図 Front View 側面図 Side View



甲第7号証 Evidence A No.7 イ号の写真 Photograph of Article A

November 16, 2015

Chief administrative judge: Administrative judge: Administrative judge: AKAGI, Keiji NAKADA, Makoto ONO, Chuetsu