Development of Doctrine of Equivalents in Japan

Tomokatsu Tsukahara

1 History of Doctrine of Equivalents in Japan

In Germany and the United States of America, the Doctrine of Equivalents came into existence soon after the patent system had started. The Doctrine has been discussed academically and was introduced into the court practices from the beginning. The criteria of the Doctrine have been refined and sophisticated by precedents (in Germany, also by the revisions of the Patent Act by the European Patent Convention), although they have undergone many changes.

On the other hand, in my country we have been discussing the Doctrine of Equivalents for only 30 years. To conventional IP practitioners, especially judges, the Doctrine has been unfamiliar. The Supreme Court has acknowledged the Doctrine and clarified the five criteria in the Ball Spline Bearing case(hereinafter "BSB decision"). In my view, the five criteria are not out of our origin. They were certainly taken from the discussions occurring in Germany and the United States.

Only a few court decisions adopted the Doctrine before the BSB decision. At that time, as well as academic discussions, two conditions such as "identification of effect" and "easiness of interchangeability" were considered as criteria of the Doctrine.

However, very unfortunately, we have been very few trial judgments affirming equivalent infringements in Japan both before and after the Supreme Court rendered the BSB decision. The plaintiffs in infringement lawsuits have recently made fewer and fewer assertions of the equivalent infringement and have instead resorted to asserting an expanded literal interpretation of the allegedly infringed claim in infringement usually in vain.

As for me, after the BSB decision of the Supreme Court, I have rendered many judgments relating to patent infringement for nearly eight years as a presiding judge of the High Court. Among those cases, the number of the cases in which the patent holders made equivalent assertions was around 10. As well as other presiding judges, I almost denied those assertions one after another. It is in only a single case that I affirmed the equivalent assertion of the patent holder (the decision dated 25th September 2006.).

For Japanese judges in charge of IP cases, nowadays, equivalent infringement assertions come to be like a sinking ship that makes its last whistle or signal of SOS. Why has such an unhappy situation occurred? This will be my theme of today. To conclude at the outset, the reason why the unhappy events happened in Japan is, in my analysis, the inappropriate literal expressions or wording of the Supreme Court's

BSB decision, where she referred to the 1st criterion, **essential part or not**, of equivalent infringement.

2. Basics of claim interpretation/construction in Japan

Firstly, let me introduce to you some of the characteristic traits of patent infringement lawsuits in Japan. Before World War II, Japanese patent law had been considerably influenced by Germany. After World War II, it has been influenced mainly by the United States, with the remarkable increase of economic dealings with her.

At present, in patent infringement litigation in Japan, defendants can assert the invalidity of plaintiffs' patent and the court is authorized to judge the invalidity of the patent, though the judgment has an effect only in the particular case. In such a patent infringement law suit , the IP High Court of Japan is the only court that may hear an appeal of the decision rendered by the district courts in the first instance.

In this respect, this is in common with the United States Court of Appeals of Federal Circuit headed by Mr. Michel here. Moreover, the IP High Court of Japan is the first instance's court of the judgment of Japan Patent Office, in which it decides if the patent is invalid or not. In this respect, it is similar to the role of the Federal Patent Court (Bundespatentgericht) of Germany.

Incidentally, it is Article 70 clause 1 and 2 of the Japan Patent Act that describes the technical scope of a patented invention in a patent infringement lawsuit. Basically speaking, it is not different from Germany's and the United States'.

Article 70 clause 1 and 2 is described as follows.

Technical scope of patented invention

(1) The technical scope of a patented invention shall be determined based upon the statements in the scope of claims attached to the application.

(2) In the case of the preceding paragraph, the meaning of each term used in the scope of claims shall be interpreted in consideration of the statements in the description and drawings attached to the application.

Therefore, the technical scope of the patented invention has to be decided upon interpretation of the meaning of words or wording found in the claims, and there is the principle that all the elements and limitations stated in a patent claim have to be found in an accused product or method so that it may fall under the technical scope of the patented invention.

To establish the technical scope of a patented invention, we consider first the wording of the claim, and then the detailed description of the invention in the

specification, the drawings, the file history of the patent, publicly known art, as well as common knowledge in the art.

3. Basics of DOE in Japan

In Germany, the scope of a patented invention had been construed with central definition theory from the beginning, so that there came to be academic discussions of expanded literal infringement, which had big similarity or affinity to discussions of equivalent infringement.

Article 14 of the German Patent Act was installed by Article 69 of European Patent Convention in 1973. In consequence, it shifted from the central definition construction to the peripheral definition construction so that they also adopted the way to construe the technical scope of patented invention based on the wording of claims in patent specifications. The way to construe it is in common in the United States, though there are still a lot of differences in other points with Germany.

On the other hand, article 2 of the protocol concerning the interpretation of European Patent Convention admits the existence of equivalent infringement as well as literal infringement.

Therefore, it can be said that there was groundwork with high compatibility or high affinity in the Doctrine of Equivalents thus in history of Germany. And the similar situation can be found in the United States.

However, in Japan, we have had no patent statute which describes the Doctrine, and there had been very few court decisions which admitted the Doctrine. Therefore, the discussions relating to the criteria of the Doctrine continued to be at an utterly lower level. In my opinion, relating to the criteria for the Doctrine, there were no original criteria originating in Japan. Every criterion that we have discussed in Japan originates from the United States' and Germany's.

The above-mentioned precedent has been rendered under such a situation. The Supreme Court admitted the Doctrine of Equivalents and clarified five criteria. However, she referred to the 1st criterion as "**that part is not an essential part of the patented invention**." Such a criterion was hardly discussed in Japan, and the expression itself was not refined and not developed sufficiently. That is because the discussions after the BSB precedent became complicated, and an unhappy history of the Doctrine started again. Moreover, in my view, district court and high court judges have even more strict attitude toward the Doctrine than before, since the Supreme Court remanded the case to the Tokyo High Court whose decision had affirmed equivalent infringement and had received a very favorable review from the judicial circles, especially the practicing lawyers. Other criteria were like the United States' or Germany's, and caused no big problems.

After the precedent was rendered, the Doctrine assertions were hardly affirmed by district courts, high courts and the newly established Intellectual Property High Court.

It is true that the IP High Court has affirmed the equivalent infringement in the "Hollow Golf Club Head" case (See the end for further details) on 29th June last year. However, it was rendered not by the Grand Panel of IP High Court, but only by the third division, while there are four divisions in total in IP High Court. As for me, I am for this judgment.

So it is not so highly probable that other divisions will soon adopt and follow the third division's judgment. In addition, against the final decision which was rendered on May 27th this year, the defendant filed an appeal to the Supreme Court. It has not yet been reported that the appeal (Revision auf Deutsch) has been accepted.

Anyway, the discussions, both in court practice and academic field, has centered on the five criteria that the Supreme Court's precedent clarified. Therefore, I would like to discuss carefully this report about what the content of five criteria is and how the "trouble-making" 1st criterion has been construed, applied and criticized in court practice and academic field.

4. Ball Spline Bearing criteria

In the BSB decision, the Supreme Court decided that when the structure described in a patent claim includes a part that is different from the contested product, then it is reasonable to decide that the structure of the contested product is equivalent to that of the patent claim and that the contested product falls under the technical scope of the patented invention, provided that the following five criteria are met:

(1) **the part is not an essential** part of the patented invention;

(2) **the object** of the patented invention can be **achieved** and **the same operational effect can be attained** even **when** the part of the claim is **replaced** by the part of the contested product;

(3) this replacement could have been **easily arrived at by a person skilled in the art** at the time the contested product was worked (e.g. manufactured);

(4) the contested product was novel and **could not have been easily conceived of by a person skilled in the art at the time of the patent application** for the patented invention;

(5) there are no special circumstances, such as that the contested product was **intentionally removed from the scope** of the patent claims **during the patent prosecution** for the patented invention.

5. Examination of Five criteria

(1) **the part is not essential**

The 1st criterion is very important and it is very hard to understand, especially in the particular case at hand. This criterion will be explained in details later.

(2) **interchangeability**

The 2nd criterion is hardly necessary to explain. This criterion is almost the same as that of Germany (Gleichwirkung auf Deutsch) and that of US. Probably there are no differences between Japan and other countries in this regard.

(3) **easiness of interchange**

The 3rd criterion is usually "easily arrived", "easiness of interchangeability", or "Auffindbarkeit" in German, though in Germany "easiness" is not specifically mentioned as criterion in the decisions by BGH.

(4) the contested product **could not have been easily conceived of at the time of the patent application**

This criterion is identical or very similar to the so-called Formstein Defense or "Free State of the Art" Defense in Germany. And this conception resembles the Wilson Sporting Goods "Hypothetical Test" in US, 1990.

The 4th criterion relates to the particular accused product. In that sense, it is something different from the hypothetical claim in US.

As above-mentioned, in Japan the patent invalidity defense was introduced into Patent Act article104-3 in 2004. Nowadays we IP judges have never been confronted with a Formstein Defense in the daily practice of patent infringement litigation. Therefore, very few Japanese practitioners know the Formstein Defense at present.

(5) **prosecution history estoppel**

This criterion derived from the practice in US. But in Europe it is generally not recognized. In Japan this criterion is often asserted by defendants and the court sometimes acknowledges the assertion.

The 5th criterion means that the part once removed from the scope of a patent claim may not be included within the technological scope by asserting equivalent in the infringement suit after the patent approval under the theory of prosecution history estoppel. The Supreme Court's judgment cited as a typical case, the case of "intentional removal from the scope of claim for an inventor's patent application". The court ruled that "in light of the theory of prosecution history estoppel, a patentee may not restore the claim that was intentionally or seemingly removed by himself/ herself from technological scope." The judgment suggests that a patentee may not assert the

Doctrine of equivalents beyond the scope of claim restricted in the course of application regardless of his/ her intention. It is generally deemed that, regardless of whether a narrowing amendment was introduced for the purpose of sustaining patentability or not, the Doctrine would not be available (Cf.US Supreme Court decisions in the cases of Festo Corp, Warner-Jenkinson, and others).

In Japan Civil Code article2 is provided "The exercise of rights and performance of duties must be done in good faith." And in the Code of Civil Procedure article 2 is provided "Parties shall conduct civil suits in good faith." In Japan many jurists tend to resort to this doctrine of "good faith".

6. The relevant date for the availability of the equivalent means

In Japan and US, the date is deemed to be the time of infringement, not the time of patent application of the patent, except for the 4th criterion. In Germany the date for the availability of the equivalent means is deemed to be the time of application.

7. The significance of the 1st criterion of BSB decision

What is "**not an essential part**" of the patented invention?

Does it mean specific words which appear in claims, and which relate to a specific feature of patented invention? That understanding is supposed to be in accordance with the BSB decision's literal expression.

Or does it mean the "essence" of patented invention, which one cannot perceive immediately from the words or wording of claims but can get only through a thorough consideration of the purpose of the patented invention? In that case, it may be different from the words or wording of claims. Therefore, the essence as the 1st criterion is the essence of the technical idea extracted from the solution to the problem in the invention.

When one takes the content of academic discussions into consideration, the first criterion of the Doctrine cannot be thought as Japanese original criterion, but as an imported idea from Germany.

Incidentally speaking, the major academic discussions have come to support the former idea that "essential part" means specific words of claims, which relate to a specific feature of patented invention. The reason is that the idea accords with the BBS decision's sentence and makes it easy to judge whether the Doctrine is applied or not. One can say that the consequence is very often against patent holders. This idea, however, is short of philosophy (no endeavor to seek “why”).

The latter idea that an essential part means the "essence" of patented invention

has been often avoided by very hectic judges. In my view, the reason is that the idea requires a careful consideration of the purpose of the patented invention and very often leads to admitting infringement and calculating huge amount of damages, which need tough analysis.

The difference between these two ideas is evident when applied them to concrete accused products. In accused products, the part which shows some specific feature characterizing patented invention is usually to be substituted. That is, it is rare that a non specific feature characterizing patented invention is substituted. Therefore, the former idea allows the infringer to be free to go. In Japan, it is probable that accused products which should be regarded , from the viewpoint of the judges in Germany and United States, as an equivalent infringement of the patented invention have been judged as non infringing.

8 "Hollow Golf Club Head" case (the Question of the day)

In this case, it can be seen that the court adopted the construction of the first criterion which agrees with the latter opinion mentioned above 7, when we carefully look at the decision's logic, the plaintiff's patent specifications, and defendant's accused products in the particular case.

I am afraid that the Doctrine of Equivalents of Japan will remain imperfect and no use, unless such views in regard to the understanding of the precedent' opinion are dominant in court practice, and then more and more lower courts render decisions based on such views.

Appendix: Explanation of the "Hollow Golf Club Head" case

quoted with consent from "www.taniabe.co.jp" "IP information" Umeda& Shinkai

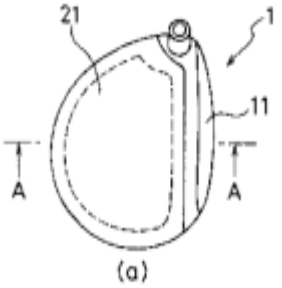
[Claim 1of the present Patent]

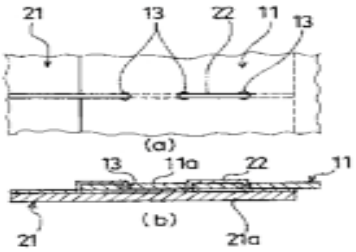
(a) A hollow golf club head, comprising a head body having a hollow structure and formed by bonding together an outer shell member made of metal and an outer shell member of fiber reinforced plastic, wherein

(b) the bonded portion of said outer shell member made of metal being bonded to the bonded portion of said outer shell member of fiber reinforced plastic,

(c) the bonded portion of said outer shell member made of metal being provided with a through hole, and

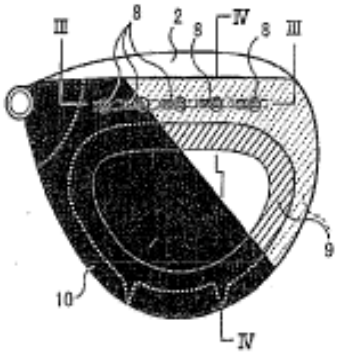
(d) a fiber reinforced plastic stitching member being passed through said through hole from an adhered interface side of said outer shell member made of metal bonded to said outer shell member of fiber reinforced plastic to an opposite surface side of said outer shell member made of metal, so that coupling said outer shell member made of metal and said outer shell member of fiber reinforced plastic

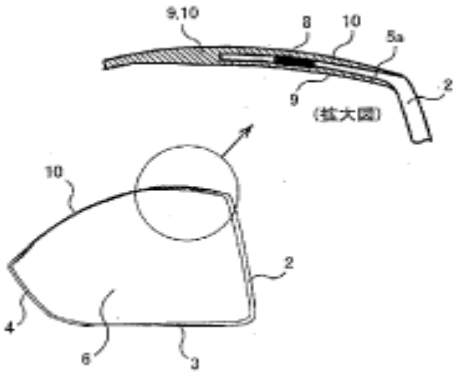


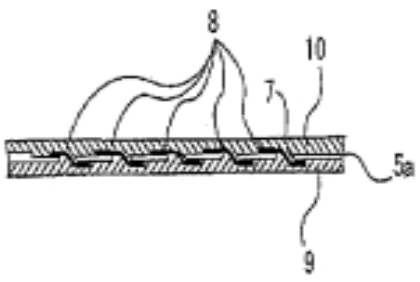


[Feature of the defendant product]

The defendant's product comprises an outer shell member 1 made of metal and upper and under outer shell members 10 and 9 made of FRP which are bonded to the outer shell member 1 respectively, the outer shell member 1 having through holes 7, each of short strips 8 made of carbon fiber passing through the through holes 7 respectively from an upper bonded interface side to an opposite under bonded interface side of the outer shell member 1, both end portions of each of short strips 8 being bonded on one portion to the upper and under outer shell members 10 and 9 respectively. Accordingly, in the dependant product, the upper outer shell member 10 made of FRP is bonded to the outer shell member 1 made of metal.







[The Court decided] (The Presiding Judge is Mr.Iimura)

Conclusion

Defendant's product does not literally satisfy the feature (d) of claim 1, but under the doctrine of equivalents, the defendant's product falls under the technical scope of the patented invention.

Reasons

1 Interchangeability exists.

2 Easiness of interchangeability exists.

3 Whether the different part is non-essential or not

According to the claim and the specification, the invention is for solving the problem by passing the member made of fiber reinforced plastic through the through holes which are formed in the bonding portion of the outer shell member made of metal, so it is recognized that the important parts of the means for solving the problem of the present invention are the features "through the through hole(s)" and "passing from an adhered interface side of said outer shell member made of metal bonded to said outer shell member of fiber reinforced plastic to an opposite surface side of said outer shell member made of metal, so that coupling said outer shell member made of metal and said outer shell member of fiber reinforced plastic".

Considered from a technical standpoint, it should be understood that the meaning of the term "a stitching member" is "the member which passes through the multiple (more than one) through holes in the outer shell made of metal, and bonds (adhered) to the outer shell member made of fiber reinforced plastic on at least two parts". However, among the above feature, it cannot be said that the feature "through the multiple (more than one) through holes" differing from one hole, and the feature "bonds (adhered) on at least two parts" are important parts to characterize the invention.

The feature "being a stitching member" of claim 1 is not found as a core or distinctive part of technical idea which forms the foundation of means for solving the problems of the present invention.

Accordingly, it is not understandable that the feature "the member which passes through the through hole is a stitching member" in the present invention is the essential part of the present invention.

September10, 2010

DEVELOPMENT OF DOCTRINE OF EQUIVALENTS IN JAPAN

IP High Court
Chief Judge (21.8.2010,retired)
Tomokatsu TSUKAHARA

http://www.ip.courts.go.jp

1. HISTORY OF DOCTRINE OF EQUIVALENTS IN JAPAN

In BRD and US, DOE came into the court practice soon after patent system had started.

The criteria of DOE have been refined and sophisticated by precedents in US and BRD.

in BRD, revised by the Patent Act and European Patent Convention

In Japan the DOE has been discussed for only 30 years.

To IP practitioners, especially judges, DOE has been unfamiliar, strange.

It should be very carefully and exceptionally applied.

The **Supreme Court Decision** appeared suddenly on **Feb 24, 1998**.

1 year earlier than SP Waner Jenkinson Decison

4 years earlier than SP Festo Desicison

Ball Spline Bearing decision(**"BSB** decision")

Before the BSB decision,

only a few court decisions adopted DOE

Even after the BSB decision,

fewer court **decisions affirming application DOE**

At present

The plaintiffs have recently made fewer assertions of DOE

Instead resorted to asserting an expanded literal claim interpretation in vain

For Japanese IP judges, DOE assertions are like putting up last-ditch resistance

Why has such an unhappy situation happened?

This is my theme.

To conclude at the outset, the reason is the inappropriate wording of the Supreme Court's BSB decision, i.e.

1st criterion **"essential part or not"**

2 BASICS OF CLAIM INTERPRETATION IN JAPAN

Before World War II

Japanese patent law and court practice were influenced by BRD.

of course, still now influenced

After World War II

influenced mainly by US.

At present

In patent infringement litigation,

defendants can assert the invalidity of the patent,

the courts can judge the invalidity of the patent,

like in US, not like in BRD.

The IP High Court is the first instance's court of the judgment of JPO,

in which the Court decides whether the patent is invalid or not.

In this respect, it is similar to the role of Bundespatentsgericht in BRD,

and to the role of CAFC in US.

Article 70 clause 1, 2 of Japan Patent Act

This Article was introduced into Japanese in 1959. This reformation made Japansystem much more similar to that US system in patent infringement suit, including DOE.

As follows. There are no fundamental differences among 3 nations.

Technical scope of patented invention

(1) The technical scope of a patented invention shall be determined based upon the statements in the scope of claims attached to the application.

(2) In the case of the preceding paragraph, the meaning of each term used in the scope of claims shall be interpreted in consideration of the statements in the description and drawings attached to the application.

Therefore, the technical scope of the patented invention has to be decided upon interpretation of the meaning of words or wording found in the claims, and there is the principle that all the elements and limitations stated in a patent claim have to be found in an accused product or method so that it may fall under the technical scope of the patented invention.

3. BASICS of DOE in JAPAN

before BSB DECISION

In BRD

The scope of a patented invention used to be construed with central definition theory, which had big similarity or affinity to DOE.

There used to be the discussion of monistische-Theorie, Zweiteilungs-,Dreituilungs-Lehre, differentiation of patentability(Patent Office) and protect(court), General(Allgemaine) invention thought, etc .

It can be said that there was groundwork with high compatibility to DOE.

In JAPAN

There has been no patent statute regarding DOE, few court decisions that admitted DOE.

There were no criteria originating in Japan. Every criterion that we have discussed in Japan originates from US and BRD.

In US

Warner Jenkinson decision Supreme C. decision, Festo CAFC decision

4 FOR DETERMINATION OF EQUIVALENCY "SINGLE FEATURE" OR "AS A WHOLE" ?

For determination of equivalent infringement in Today's Japan

the single feature of the claim

element by element, **all elements rule, all limitations rule** is considered

like in US

the claimed invention as a whole used to be considered

like in BRD

The SUPREME COURT DECISION in BSB CASE

The Supreme Court admitted DOE and clarified 5 criteria.

The Supreme Court referred to the 1st criterion as "that part is not an essential part of the patented invention".This is problematic expression ! Other criteria caused no big problems.

1 Such a criterion was hardly discussed in Japan.

2 The expression was not refined and not developed sufficiently.

3 After BSB decision the discussion became more complicated.

4 Judges are even more strict and cautious to DOE than before.

BSB Decision's 5 criteria

(1) **the part is not an essential part** of the patented invention;

imported from BRD's "general(allgemain) technical idea"

(2) **interchangeability**

the object of the patented invention can be achieved and the same operational effect can be attained;

imported from US

(3) **easiness of interchange**

the replacement could have been easily arrived at by a person skilled

in the art;

imported from US

(4) **not easily conceived of**

the contested product was novel and could not have been easily conceived of by a person skilled in the;

partly imported from US, partly based on Formstein Defence

(5) **prosecution history estoppel**

thoroughly imported from US. Not releaed to BRD.

5 The RELEVANT DATE for the AVAILABILITY of DOE MEANS

the time of infringement in US, JP

the time of patent application in BRD

6 The SIGNIFICANCE of the 1st CRITERION

What is "not an essential part" of the patented invention?

A It means specific words which appear in claims, and which relate to a specific feature of patented invention.

B It means the "essence" of patented invention, which one cannot perceive immediately from the words or wording of claims but can get only through a thorough consideration of the purpose of the patented invention.

in Japan opinion A…..the majority of judges

among opinion B…..some prominent judges, lawyers

“not an essential part“ of the patented invention

The 1st criterion cannot be thought as Japanese original criterion, but as an idea imported from BRD.

Opinion A makes it easy to judge whether the Doctrine is to be applied to the specific case, or not.

Consequently

- **Opinion A is very often against patent holders.**
- **Statistically about 70% among lost equivalent infringement cases were based on opinion A.**

7 "Hollow Golf Club Head" case

IPHighCourt 2009(gyouke)10006case,decided on 29.6.2009

In this case, the court adopted the construction of the 1st criterion which fundamentally agrees with the opinion B.

Hopefully, above-mentioned views as to the understanding of the precedent's opinion are dominant in the court practice, and then more and more lower courts render decisions based on such views.

APPENDIX: EXPLANATION OF THE "HOLLOW GOLF CLUB HEAD" CASE

[Claim 1of the present Patent] original text

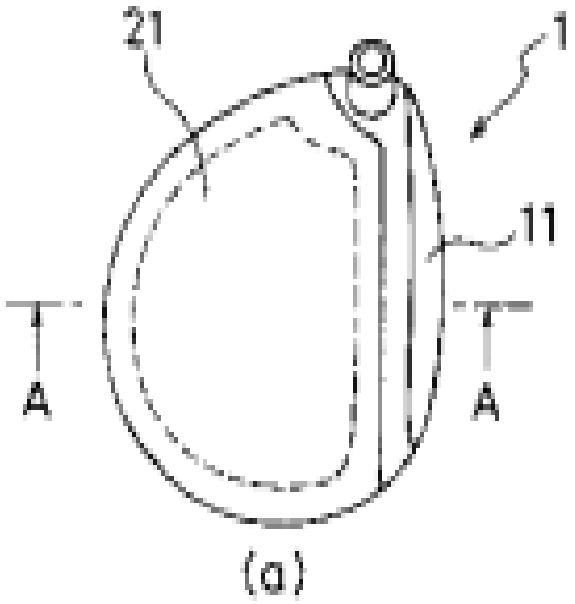
(a) A hollow golf club head, comprising a head body having a hollow structure and formed by bonding together an outer shell member made of metal and an outer shell member of fiber reinforced plastic, wherein

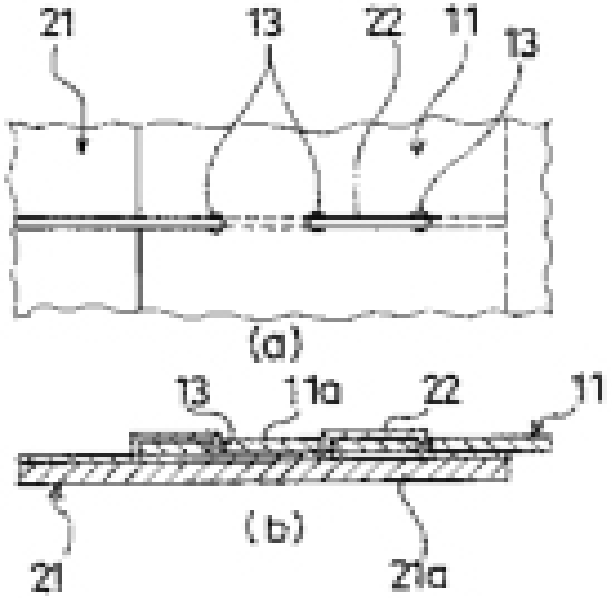
(b) the bonded portion of said outer shell member made of metal being bonded to the bonded portion of said outer shell member of fiber reinforced plastic,

(c) the bonded portion of said outer shell member made of metal being provided with a through hole, and

(d) a fiber reinforced plastic stitching member being passed through said through hole from an adhered interface side of said outer shell member made of metal bonded to said outer shell member of fiber reinforced plastic to an opposite surface side of said outer shell member made of metal, so that coupling said outer shell member made of metal and said outer shell member of fiber reinforced

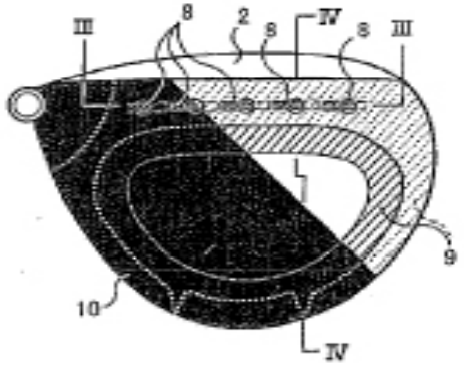
plaintiff's patent figures

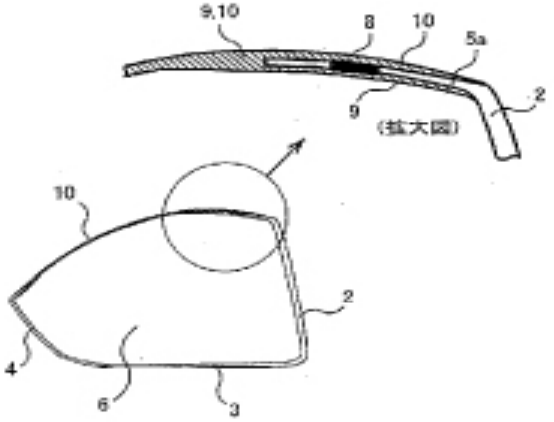


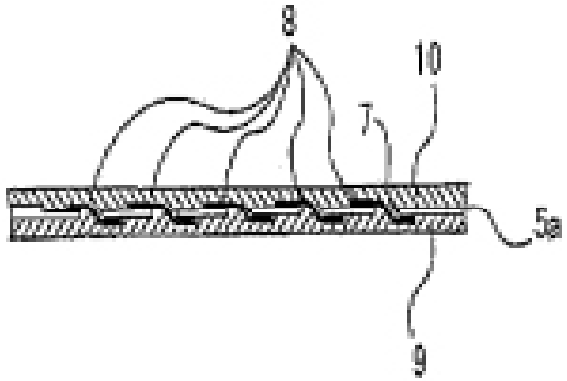


[Feature of the defendant product]

The defendant's product comprises an outer shell member 1 made of metal and upper and under outer shell members 10 and 9 made of FRP which are bonded to the outer shell member 1 respectively, the outer shell member 1 having through holes 7, each of short strips 8 made of carbon fiber passing through the through holes 7 respectively from an upper bonded interface side to an opposite under bonded interface side of the outer shell member 1, both end portions of each of short strips 8 being bonded on one portion to the upper and under outer shell members 10 and 9 respectively. Accordingly, in the dependant product, the upper outer shell member 10 made of FRP is bonded to the outer shell member 1 made of metal.







The Court decided as follows (the presiding judge is Mr.Iimura)

Conclusion

Defendant's product does not literally satisfy the feature (d) of claim 1, but under the doctrine of equivalents, the defendant product falls under the technical scope of the patented invention.

Reasons

1. **Interchangeability exists**
2. **Easiness of interchangeability exists.**
3. **Whether the different part is non-essential or not**

   According to the claim and the specification, the invention is for solving the problem by passing the member made of fiber reinforced plastic through the through holes which are formed in the bonding portion of the outer shell member made of metal, so it is recognized that the important parts of the means for solving the problem of the present invention are the features "through the through hole(s)" and "passing from an adhered interface side of said outer shell member made of metal bonded to said outer shell member of fiber reinforced plastic to an opposite surface side of said outer shell member made of metal, so that coupling said outer shell member made of metal and said outer shell member of fiber reinforced plastic".