Summary of Judgement

1. Main Text

- (1) The Defendant shall not manufacture or sell the product in the List appended to this judgment.
- (2) The Defendant shall dispose of the product in the List appended to this judgment.
- (3) The Defendant shall pay the Plaintiff 500 million yen and delinquency charges at the annual rate of 5% from December 13th, 2019 to the date of full payment.
- (4) The Defendant shall bear the court costs.
- (5) This judgement may be provisionally enforced as far as paragraphs 1 and 3 are concerned.

2. Literal Infringement

The "FRP thread member" in Element C means an FRP thread member passing through the plurality of through-holes provided in the bonding portion of the metallic outer shell member. An FRP thread member that passes through only a single through-hole is not included in the above meaning.

Therefore, the Defendant's Product wherein a single strip passes through only a single through-hole does not fulfill Element C.

3. Infringement under the Doctrine of Equivalents

- (1) Fulfillment of Requirement 1
 - A The essential parts of the Invention

The Invention has achieved its objective of enhancing the bonding strength between the metallic outer shell member and the FRP outer shell member which are made from different materials thorough the following two features:

- (a) "interposing" a thermoset FRP thread member which is well-adhesive to the FRP outer shell member between the FRP outer shell member and the metallic outer shell member;
- (b) making the FRP thread member "hook" the metallic outer shell member. (The FRP thread member passes through the through-holes provided in the metallic outer shell member and takes the form of "hooking". Then, the FRP thread member is thermally cured to maintain the shape and "hook" the metallic outer shell member)

These two features are not seen in the existing technology.

Accordingly, the essential parts of the Invention lie in the structure of "interposing" the FRP thread member between the FRP outer shell member and the metallic outer shell member and "hooking" the metallic outer shell by the FRP thread member which maintains a shape of passing through the through-holes after having heat added.

Furthermore, even if the Invention changes its structure such that the FRP thread member is divided into pieces and each piece of the divided FRP thread member passes through a single through-hole provided in the metallic outer shell member, there is no change in terms of "interposing" an FRP thread member between the FRP outer shell and the metallic outer shell and thereby "hooking" the metallic outer shell member by the FRP thread member. Therefore, in terms of eliciting the effect of the Invention, it has no relevance whether an FRP thread member passes through multiple through-holes or a single through-hole. Accordingly, the structure in which an FRP thread member passes through multiple through-holes is not an essential part of the Invention.

B The Defendant's Product

The Defendant's Product can be deemed to possess the above-mentioned two essential parts of the Invention.

The Defendant's Product consists of the multiple FRP strips corresponding to the FRP thread member of the Invention. Each FRP strip is thermally cured to "hook" the metallic outer shell member. Moreover, the metallic outer shell member is bonded with the FRP outer shell member by the "interposed" FRP strips. In this manner, the Defendant's Product can be regarded as having two features, "interposing" and "hooking", which are essential parts of the Invention.

Accordingly, the Defendant's product fulfills Requirement 1 of the Doctrine of Equivalents.

(2) Fulfillment of Requirement 2

As per above-mentioned (1), even if the Invention changes its structure such that an FRP thread is divided into pieces and each piece of the divided FRP thread member passes through a single through-hole provided in the bonding portion of the metallic outer shell member, it would still have the same function effect of enhancing the bonding strength between the FRP outer shell member and the metallic outer shell member as the Invention.

Accordingly, the Defendant's Product fulfills Requirement 2 of the Doctrine of Equivalents.

(3) Fulfillment of Requirement 3

The Defendant's Product has a different structure from the Invention in terms of each of multiple strips passing through a single through-hole in the metallic outer shell member. However, this structure of having each of plural FRP thread members pass through a single through-hole, in terms of being a structure that produces the effect of the Invention, can be deemed as being a commonplace structure that does not require ingenuity. Therefore, a person ordinarily skilled in the art could have easily conceived of replacing the structure in the Invention with the structure in the Defendant's Product.

Accordingly, the Defendant's Product fulfills Requirement 3 of the Doctrine of Equivalents.

(4) Fulfillment of Requirement 5

The amendment made by the Plaintiff was merely intended to clarify the meaning of "FRP thread member maintaining a shape of passing through the plurality of the through-holes". The plaintiff had no intention to narrow the scope of the claim by this amendment. Furthermore, Paragraph [0015] of the description does not describe a structure such as that of the Defendant's Product. Thus, it cannot be said that the structure of the Defendant's Product was intentionally excluded from the claim.

Accordingly, the Defendant's Product fulfills Requirement 5 of the Doctrine of Equivalents.