An overview of proceedings of patent infringement litigation in china



Provisions on the interpretation of claims in China

• Patent Law(implemented in 2008)

Paragraph 1, Article 59 the scope of protection of patent rights for an invention or a utility model shall be based on the contents of the claims; the descriptions and drawings may be used to explain the contents of the claims.

• Interpretations of the Supreme People's Court Concerning Certain Issues on the Application of Law for the Trial of Cases on Disputes over Infringement on Patent Rights (Implemented in 2010)

Article 2 The People's Court shall, according to the recordation of the claims in combination with the understanding of the claim by ordinary technicians in the field after reading the descriptions and drawings, determine the content of the claims as prescribed in Paragraph 1, Article 59 of the Patent Law.

Article 3 With regard to a claim, the People's Court may make interpretations by applying the descriptions and drawings, relevant claim in the patent claims and patent examination files. Where the language of the claim is specially defined in the descriptions, such special definition shall prevail.

Where the meaning of the claim could not be determined with the aforesaid methods, interpretations may be made in combination with such publicly known documents as reference books and text books as well as the common understanding of ordinary technicians in the field.

Article 6 Where a right holder includes a technical solution, which the patent applicant or patentee has abandoned through amendments of claims, specifications or through statement of opinion in the patent granting or invalidation procedure, in the scope of patent protection in a patent infringement case, the people's court shall not support it. (*Principle of estopel*)

Provisions on the determination rules of patent infringement in China

• Interpretations of the Supreme People's Court Concerning Certain Issues on the Application of Law for the Trial of Cases on Disputes over Infringement on Patent Rights (Implemented in 2010)

Article 7 When determining whether the alleged infringing technical solution falls into the scope of patent protection, the people's court shall examine all the technical features described in the claim asserted by a right holder. (*all-element rule*)

Where the alleged infringing technical solution contains technical features same as or equivalent to all the technical features described in a claim, the people's court shall determine that it falls into the scope of patent protection. Where compared with all the technical features described in a claim, the technical features of the alleged infringing technical solution are in lack of more than one technical feature as described in the claim or contain more than one technical feature which are neither same as nor equivalent to any technical feature as described in the claim, the people's court shall determine that it does not fall into the scope of patent protection. (*literal infringement, equivalent infringement*)

• Several Provisions of Supreme People's Court on Issues Relating to Laws Applicable for Trial of Patent Dispute Cases (Issued in 2001, Revised in 2015)

Article 17 "The scope of protection of patent rights for an invention or a utility model shall be based on the contents of the claims. The descriptions and drawings may be used to explain the contents of the claims " referred to in the first paragraph of Article 59 of the Patent Law shall mean that the scope of protection of patent right shall be based on the scope determined by all the technical features set out in the claim, and shall include the scope determined by features equivalent to the said technical features.

Equivalent features shall mean features which use basically the same means to achieve basically the same functions and attain basically same effects as the technical features set out, and which can be conceivable, at the time of occurrence of the infringement act, by ordinary technicians in the field without making creative efforts. (*Determination of equivalent features*)

Common defense by the alleged infringer in China

1.Non-infringement defense

2.Defense based on not being deemed as infringement

3. Prior art defense

4. Defense based on legitimate source

5. Defense of not stopping the infringement

Article 62 of Patent Law In a patent infringement dispute where the accused infringer shows proof to prove that his/her technology or design implemented falls under the prior art or prior designs, it shall be deemed not to have infringed patent rights.

Article 14 of Interpretations of the Supreme People's Court Concerning Certain Issues on the Application of Law for the Trial of Cases on Disputes over Infringement on Patent Rights (Implemented in 2010) Where all the technical features which are alleged to fall into the scope of protection of a patent are same as or are not substantively different from the corresponding technical features of a technical solution in prior art, the people's court shall determine the technology implemented by the alleged infringer as an Prior art as provided in Article 62 of Patent Law.

Comparison between Invention and D method

| | Patented Invention | | D method | |
|---|---|---|---|--|
| Α | Control method for <u>car navigation system</u> that displays a map on a display screen, the method comprising steps of: | a | A control method for <u>car navigation system</u> comprising a server and a terminal that displays a map on a screen of D terminal | |
| в | reading, from <u>first memory means</u> in which facility data comprising display data indicative of a plurality of service facilities and coordinate data indicative of existing positions of the service facilities have previously been stored, the display data to display the plurality of service facilities on the display screen; | ь | holding D spot data including D name data indicative of a plurality of spots and D position data indicative of existing positions of the spots in <u>memory area A of D server</u> of the <u>car navigation system</u> in order to display the plurality of spots corresponding to the D name data on the screen; | |
| С | designating one of the plurality of service facilities displayed on the display screen in accordance with an operation; | с | receiving an instruction to register one of the plurality of spots displayed on the screen as a "memo position"; | |
| D | reading coordinate data corresponding to the designated one service facility from the first memory means; | d | obtaining D position data corresponding to the designated spot from <u>memory area A of D server</u> to be registered according to the instruction; | |
| Е | storing the read coordinate data as user registered data in <u>second</u> <u>memory means</u> ; | e | storing the D position data as D memo data in <u>memory area B of</u> <u>D server</u> ; | |
| F | displaying a position indicated by the coordinate data read from the <u>second memory means</u> by superimposing a predetermined pattern on to the map when the map is displayed on the display screen. | f | superimposing an icon on the map indicated by the D position data of D memo data read from <u>memory area B of D server</u> when the map is displayed on the screen. | |

No dispute regarding the division of technical features and comparison

- Plaintiff : Allegation of literal infringement, at least constitute infringement under DOE
- **Defendant** : Allegation of non-infringement . No allegation of Prior art defense.

The court and the parties confirm the issues in dispute.

- Whether D method satisfies "first memory means"
- Whether D method satisfies "second memory means"
- Whether all the features of the "car navigation system" are installed in the vehicle
- The influence of the prosecution history on the determination of infringement

Issue 1: Whether D method satisfies "first memory means"? Plaintiff's Allegations





• Claim 1: <u>first memory means</u> in which facility data comprising display data indicative of a plurality of service facilities and coordinate data indicative of existing positions of the service facilities have previously been stored.

• **First memory means** in the patent is not limited to a CD-ROM in the embodiment. It refers to any suitable memory area for storing facility data. The type or location of the memory area is not important.

• In the D method, there is a <u>memory area A</u> for storing spot data. The spot data corresponds to the facility data of claim 1. Thus the D method comprises technical feature that is identical to the first memory means of claim 1.

• Even if the first memory means in the patent is interpreted as portable memory medium such as CD-ROM, the D method still comprises equivalent feature of the first memory means of claim 1.

• Substantially the same means: portable memory medium such as CD-ROM of the patent and a storage used in D server.

• Substantially the same function: function of storing data for navigation.

• Substantially the same effect: effect of storing data for navigation. The fact that the storage used in D server achieves other technical effects, such as larger capacity and enhanced reliability, should not be considered.

• A person with ordinary skills in the art can easily envisage that the storage used in D server and the portable memory medium of the patent are mutually replaceable. The storage used in D server is very conventional one in the art.

Defendant's allegations

- D method doesn't satisfy "first memory means"
 - The claim : Description by an abstract word "memory means"



• Detailed description :

• The only example of "first memory means" disclosed in the specification is CD-ROM connected to other elements by bus lines [Fig. 1] [0010]

• "By storing the facility data in a CD-ROM, which is an <u>inexpensive</u> memory medium, and by storing user position registering data in a rewritable RAM, improved convenience and cost reduction can both be achieved." [0015]

- => According to Article 2, Interpretations of the Supreme People's Court Concerning Certain Issues on the Application of Law for the Trial of Cases on Disputes over Infringement on Patent Rights (Implemented in 2010), the claim shall be interpreted in combination with the specification.
- ⇒ Portable memory medium as CD-ROM is convenient and inexpensive. In contrast, other memories like those used in a server are known by person skilled in the art as expensive, due to its requirement on large scale and reliability.
- ⇒ Thus, non-portable memory medium cannot achieve the technical effect described in the present specification.
 [0015]

\Rightarrow "first memory means" refers to a portable memory medium such as CD-ROM.

Defendant's Allegations

- ✓ The storage in D server is not equivalent to portable memory medium such as CD-ROM ("first memory means").
- **Different means**: portable storage such as CD-ROM is significantly different from storage used in D server
- **Different effect**: the storage in D server has much larger capacity and enhanced reliability, which is not substantially the same as the effect of portable storage such as CD-ROM.
- Can't be envisaged without inventive effort: in the year 2013, CD-ROM had been replaced widely with USB disks as portable storage; however, remote and distributed computation center including D server was not common in 2013 and years thereafter.

Issue 2: Whether D method satisfies "second memory means"?

Plaintiff's Allegations

D method satisfies "second memory means"

- Defendant's car ravigation system
- Claim 1: storing the read coordinate data as user registered data in second memory means.

• second memory means in the patent is not limited to a RAM in the embodiment. It refers to any suitable memory area for storing user registered data. The type or location of the memory area is not important.

• "first memory means" and "second memory means" in the patent only need to be mediums each of which fulfills the functions defined by the claims. The first memory means and the second memory means may belong to one single physical storage device, or locate in different physical storage devices. Both of these two different configurations fall within the protection scope of claim 1.

• In the D method, there is a <u>memory area B</u> for storing memo data. The memo data corresponds to the user registered data of claim 1. Thus, the D method comprises technical feature that is identical to the second memory means of claim 1.

• Even if the second memory means in the patent is interpreted as memory medium distinguished from the memory medium as "first memory means", the D method still comprises equivalent feature of the second memory means of claim 1.

• the storage for storing memo data in D method achieves substantially the same function (of storing user registered data) and generate substantially the same effect (of storing user registered data) by the means substantially the same as the second memory means of the patent and can be envisaged, in the year 2013 and thereafter, by a person with ordinary skills in the art without making inventive effort.

Defendant's allegations:

D method doesn't satisfy "second memory means"



- Wording of the claim :
 - The claim language distinguishes two memory mediums, each storing different type of data.
- Detailed description in the specification :
 - All that are described are two different memory mediums, i.e. CD-ROM ("first memory means") and RAM ("second memory means") [0009]

• "By storing • • • facility data in a CD-ROM, which is an inexpensive memory medium, and storing user position data in rewritable RAM, improved convenience and cost reduction can both be achieved. [0015]

"second memory means" refers to a memory medium distinguished from the memory medium as "first memory means".

The storage feature in D method is not same or equivalent to the second memory means.

Issue 3: Whether all the features of the "car navigation system" are installed in the vehicle? Plaintiff's Allegations

Not all the features of the system are installed in the vehicle.

• Patent claims are generally a reasonable generalization made on the basis of embodiments disclosed in the description or drawings.

Embodiments are merely examples of the technical solution within the protection of the claims and are preferred modes for achieving the invention or utility model as deemed by the patent applicant.

The protection scope of a patent shall not be restricted by the particular embodiments disclosed in the description.

• The objective of the invention: to provide a car navigation system control method which allows the user to register a user registration without performing complicated operations for displaying service facilities on the map.

• According to Claim 1, compared to the conventional car navigation system, it is easier for the user to register a user registration. Thus, claim 1 is a reasonable generalization made on the basis of embodiments disclosed in the description and drawings. The protection scope of the patent shall not be restricted by the particular embodiments disclosed in the description.

Plaintiff's Allegations

Even if all the features of the "car navigation system" of the patent are installed in the vehicle, the car navigation System of D method is equivalent to that of the Patent.

• **Substantially the same means:** there is no essentially difference between a central system with all elements being installed together and a distributed system with elements being connected using communication network.

• **Substantially the same function:** the distributed system of D method and central system of the patent has the same function of navigation.

• Substantially the same effect: the distributed system of D method and the central system of the patent achieve substantially the same effect of allowing the user to register a user registration without performing complicated operations for displaying service facilities on the map, which just is the objective of the invention and the key point. The fact that distributed system of D method achieves other technical effects, such as power saving, high efficiency, endurance, and reliability, should not be considered.

• A person with ordinary skills in the art can easily envisage that the distributed system of D method and the central system of the patent are mutually replaceable. In the year 2013 and thereafter, a distributed system can be seen everywhere. Relevant publications before Defendant uses D method can prove that person with ordinary skills in the art of automobile navigation can very easily envisage the use of mobile communication system in replacement of corresponding technical features in the present patent.

Defendant's Allegations

✓ All the features of the **car navigation system** are installed in the vehicle.

• Specification

• The car navigation system is a single equipment comprising plural elements (GPS sensor, system controller, memories and the like), the elements being connected by bus lines. (Fig. 1)

• Large volume data such as map data and service facilities data are previously stored in a CD-ROM. [0010]

• Upon selection/designation by a user of a facility, the position coordinate (a pair of longitude and latitude data) and the display pattern data for the selected facility are read out from CD-ROM and are written in RAM, in the position registration data table. [0015, 0016]

• Opinion submitted during prosecution : "By providing the second memory means using RAM backed up by power supply from a large capacity car-battery, the registration data can be continuously stored, resulting in improved convenience for users. Such an effect can <u>only</u> be obtained **because the navigation** system is installed in a vehicle with a large-capacity car battery."

→ "Car navigation System" of the Patent is a single equipment that can be installed in a car. As such, the "control method" comprises features unique to such a single appliance.

Defendant's Allegations

- The distributed navigation system in D method is not equivalent to the single navigation equipment of "car navigation system" in the patent
 - **Different means**: a single navigation equipment is significantly different from the distributed "mobile terminal + server" system
 - Same function: same navigation function
 - **Different effect**: The "effect" element is separate from the "function" element. Function refers to what the system does, while effects refer to how well the system does the function.

The distributed system has significant difference in the effect of the navigation system, such as computation power, efficiency, endurance, reliability compared with the single equipment of the present patent.

• Can't be envisaged at the time of the allegedly infringing action (in 2013):

In the year 2013 when D method has been conducted, a single equipment to be installed in the car as car navigation system was prevalent. Person skilled in the art couldn't have envisaged the distributed "mobile terminal + server" car navigation system without inventive effort.

The Plaintiff holds that after 2013 the distributed system can be seen everywhere, but provides no specific evidence to support the timing when the switch happened.

The dominance of single navigation equipment has continued since 2013. The fact that nowadays in 2019 a distributed navigation system is prevalent can not be dated back to 2013. At least when the Defendant started conducting the D method and for many years thereafter, it would require inventive effort to envisage the distributed system.

Issue 4: The influence of the prosecution history on the determination of infringement Plaintiff's Allegations

The prosecution history has no impact on the determination of infringement

About written opinion A

• Written opinion A: "However, Cited Invention 1 relates to a portable navigation apparatus for pedestrians and does not disclose a control method for car navigation system as in the case of the invention of the application. Cited Invention 1 is directed to solve the problem unique to the navigation apparatus for pedestrians and such a problem would not have been solved by the navigation apparatus for automobiles."

• A control method of a navigation system for pedestrians is abandoned by the patentee.

• However, the D method is used in car navigation system, not a navigation system for pedestrians. The written opinion A have no impact on the determination of infringement.

Plaintiff's Allegations

About written opinion B

• Written opinion B: The Invention of the present application involves "second memory means for storing the read coordinate data as user registered data" as specified in Claim 1. By providing this second memory means using RAM that is backed up by being supplied with power from a battery even when the power source of the system is shut down so as not to extinguish the data such as a user registration flag (specification, [0009]), user registration data can be continuously stored and held even when the power source is turned off, thus exhibiting an effect of improving convenience for users. Such an effect can be obtained <u>only</u> because the system according to the invention of the application is installed in the vehicle and constant power supply from a vehicle battery with a large capacity to RAM is possible.

• The statements indicate that RAM can be used to provide the second memory means, and do not indicate that the second memory means has to be RAM. The second memory means can be any suitable storage device. And if RAM that is backed up by being supplied with power from a battery is used as the second memory means, a further technical effect can be achieved. However, this technical effect is unnecessary for the objective of the invention.

Plaintiff's Allegations

• The word "**only**" does not cause the content of claim 1 to be restricted to that the system of claim 1 is installed in the vehicle, and the second memory means is RAM. The "effect" mentioned here is not the effect necessary for the invention, and is not the effect achieved by the technical solution of claim 1. It is a preferred effect that is achieved if the invention adopts additional features.

• Patentee has clearly emphasized that the further effect is based on a structure of providing the second memory means using RAM that is backed up by being supplied with power from a battery. Claim 1 does not recite this structure. It can be sure that the examiner had noticed patentee's emphasis and the lack of the above structure in claim 1. That is to say, the written opinion B has nothing to do with the allowance of the patent. The patentee does not abandoned anything through the written opinion B. **The written opinion B** have no impact on the determination of infringement.

The technical content of D method which is different from the embodiments of the present patent is not excluded by the Patentee, and in fact cannot be excluded.

 Conducting D method constitutes literal infringement or infringement under the doctrine of equivalence.

Defendant's allegations

 Estoppel: the distributed car navigation system and the memory means outside of the car have been abandoned by the Applicant by making the opinion statement in the prosecution history.

The Applicant's statement includes two points in response to the examiner's rejection on inventiveness: A) cited Invention 1 uniquely concerns with the pedestrian navigation, the problem therein wouldn't have been solved by automobile navigation apparatus; and B) the effect of data not being extinguished and improved convenience for users can be obtained **only because of the single car navigation system and the RAM being powered by the vehicle battery**.

• Each statement of two points A and B shall be considered **essential** to overcome the inventiveness rejection. Otherwise, the Applicant has no need to state point B. The applicant states point B only because he doesn't believe point A by itself is insufficient for inventiveness. The statement of effect is not merely supplementing to the opinion A (pedestrian vs. car); if the Applicant considers it merely supplemental, it is unusual to use as strong restrictive tone as "such an effect <u>can</u> be obtained <u>only</u> because ...". The strong restrictive tone reflects the Applicant's (Plaintiff's) belief in the importance of the effect.

• Chinese Patent Law (A22.3) requires **both** prominent substantive characteristics and significant progress for inventiveness. Thus, the statement of "the effect of data not being extinguished and improved convenience" is essential to support the inventiveness.

- ♦ Thus, the statement of effects is essential to the recognition of inventiveness and thus to the allowance of the patent.
- Plus, the "single equipment" as "car navigation system" and another memory which can be installed in the car to be powered by the vehicle battery as "second memory means" are essential to achieve the stated effect (=> "can ... only because ...")

Defendant's allegations

- Therefore, since the Applicant explicitly exclude other implementations (the distributed navigation system, and another memory that isn't powered by the vehicle battery) as not achieving the above effect, the Applicant abandons such other implementations by the statement.
- The Applicant himself is the one who is the most clear of what features he claims. Even though his claim doesn't limit RAM or vehicle battery, the Applicant still chose to emphasize the effect which can only be achieved with the existence of RAM and vehicle battery – this reflects his explicit wish and desire establish the inventiveness with the existence such features.
- Therefore, the implementation with distributed navigation system the storage in D server is intentionally abandoned by the Applicant.

→Estoppel applies to "car navigation system" and "second memory means" that the scope of protection shall not extend to the distributed navigation system and the storage in D server.

No literal infringement or that under Doctrine of Equivalence is constituted.

THE SUMMARY OF THE JUDGMENT

CHINA 2019.09

THE KEY ISSUE DISPUTED

• whether the alleged infringement method falls within the scope of protection of the patent?

—1. Whether the memory area A and B of the D server in the alleged infringement method satisfy "the first memory means" and "the second memory means" in the patent claim.
—2. Whether the scope of protection of the patent involved

should be limited to all technical features of the car navigation system are installed in the vehicle. WHETHER THE MEMORY AREA A AND B OF THE D SERVER IN THE ALLEGED INFRINGEMENT METHOD SATISFY "THE FIRST MEMORY MEANS" AND "THE SECOND MEMORY MEANS" IN THE PATENT CLAIM.

The patent

• According to the literal description of the patent claim, the purpose of the distinguishing "the first memory means" and "the second memory means" is to process two types of data, and is not to limit the physical medium in which the two types of data are stored.

The D method

• The two types of data are respectively stored in different memory areas on the D server, namely memory area A and memory area B. That is to say, there are corresponding "the first memory means" and "the second memory means" on the D server.

THE COURT DOESN'T AGREE WITH THE DEFENDANT'S OPINION

- The understanding of "the first memory means" and "the second memory means" by ordinary technicians in the field after reading the specification and drawings is not limited to the CD-ROM and the RAM, and the scope of protection of the patent claims can not be only limited by the embodiment.
- Even if " the first memory means" is limited to the CD-ROM and " the second memory means" is limited to the RAM as the defendant argued, the D method is equivalent to the corresponding patent claims.

WHETHER THE SCOPE OF PROTECTION OF THE PATENT INVOLVED SHOULD BE LIMITED TO ALL TECHNICAL FEATURES OF THE CAR NAVIGATION SYSTEM ARE INSTALLED IN THE VEHICLE.

No, here are the reasons.

1. After comprehensively considering the invention purpose of displaying the location of a specific service facility with a simple operation, as well as the plaintiff's written opinion, it cannot be determined that the patent was granted based on the technical feature that all the components of the car navigation system are installed in the vehicle.

2. The alternative technical means in the alleged infringement method did not appear at the date of the patent application, and the plaintiff could not intentionally abandon the unknown technical means at the time of applying for the patent.