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Patent Reexamination Board v. Hong Kong Mei Ngai (Chu Kee) Metal Manufacturers

Citation: The Beijing Higher People's Court's Judgment No. Gaojingzhongzi 9/1992

Date of judgment: March 4, 1992

Procedural history

The Patent Reexamination Board (PRB) of the Patent Office decided to have invalidated the invention patent (85101517) of the Hong Kong Mei Ngai (Chu Kee) Metal Manufacturers (Mei Ngai). Mei Ngai sued the PRB in the Beijing No. 1 Intermediate People's Court, which made the first-instance judgment to have reversed the PRB's decision, and the PRB appealed to the Beijing Higher People's Court.

Issue

Whether the object and effect of an invention had a role to play in the assessment of the inventiveness of an invention?

Facts

Mei Ngai was the patentee of patent (85101517) for the invention of inert clamp-on gate. The technical features presented in the characterizing portion of the independent claim of said invention patent went like this: "at the end of the pin shaft is installed the bushing of H-type cross section along the axis, the extruding edge of the straight rod of the pillar was installed in the concave groove of said bushing." The object of the invention patent was to simplify the structure of a device of slant connecting rod and straight rod, improve the rigidity of the gate, ease the movement

of the gate, and reduce the noise.

Upon examining the invalidation request, the PRB held that as the comparison of the invention patent of the inert clamp-on gate with reference 1 (UK patent GB136763) and reference 2 (Japanese patent 59-14156) showed, reference 1 had disclosed all the technical features of the independent claim, except the H-type bushing, and reference 2 had disclosed the gliding casing of H-type cross section that was identical with the bushing of the H-type cross-section used in the patent in suit in structure, in coordination with other parts, in operation principle and in virtual effect. Accordingly, the independent claim of the invention in suit did not have the prominent substantive feature provided for in Article 22 of the Patent Law. The PRB declared said invention patent invalid for lack of inventiveness.

The first-instance court held that the inventiveness of a patent should be determined with account taken of all the objects of the invention patent in suit, technical solution and the technical effect as a whole. While reference 2 had disclosed said gliding casing of H-type cross section, it was used to solve the problem of ground load of the middle wheels of a gate for the courtyard railing with the co-ordination of the lock-in device, but the invention patent in suit used a lot of H-type bushings between the straight rods to improve the rigidity of the gate and to reduce the noise. The two were substantially different in object of invention, the technical solution to realize object of invention and the final technical effect. The court, therefore, ruled that the Mei Ngai's invention patent possessed prominent substantive feature and conformed to the Patent Law in terms of inventiveness, and decided to have revoked the PRB's invalidation decision.

The PRB argued in its appeal that in several places in the first-instance judgment was highlighted the difference between reference 2 and the invention patent in suit in object of invention, and this determination constituted the important part of the grounds on which the court had made its judgment. Adoption of the principle for judging the case as stated in the judgment was not only seriously contrary to the provisions of the Patent Law, but also run counter to the common international practice.

Rule of law

Article 22 (3) of the Patent Law Inventiveness means that, as compared with the technology existing before the date of filing, the invention has prominent substantive features and represents notable progress, and that the utility model has substantive features and represents progress.

Reasonina

The independent claim of the inert clamp-on gate invention patent consisted of the preamble and characterizing portions. As the comparison of the technical solution of the invention patent in suit with the prior art showed, reference 1 disclosed each and every technical feature of the former portion, but reference 2 did not disclose the distinctive technical features of the latter. The characterizing portion of the independent claim of the inert clamp-on gate invention patent was that "at the end of the pin shaft is installed the bushing of H-type crass section along the axis, the extruding edge of the straight rod of the pillar was installed in the concave groove of said bushing". This was the most essential technical feature concerning the mutual connection of the main parts in the structure of the patented invention patent as a whole. It was exactly the H-type bushing and its combination with the straight rods that had added the prominent substantive feature to the invention patent in suit. What was disclosed in reference 2 was a mid-wheels device of a telescopic gate, where in the pushing gate and the inert clamp-on gate of the invention patent in suit, were gates of diametrically different structure. While the gliding casing of H-type cross-section was also used in the wheel device in reference 2, it had nothing to do with the rigidity of the telescopic gate and the co-ordination of the main movable parts of the gate. Thus the gliding casing of Htype cross-section in reference 2 was substantially different from the H-type bushing of the invention patent in suit in function. It was impossible for a person of ordinary skill in the art to obtain the useful technical teaching of the invention patent in suit from reference 1 in combination with reference 2. It required inventive thinking for him to do so. For that reason, the technical solution of the invention patent in suit was not obvious to those of ordinary skill in the art.

Whether an invention patent possessed its prominent substantive feature should be determined with account taken not only of the height of innovation of the technical solution of the invention patent *per se*, but also of the object and effect thereof considered as a whole.

With the object and effect of the inert clamp-on gate invention patent, it might be further proved that the invention patent in suit possessed its prominent substantive feature compared with the prior art. The object of the invention patent was to simplify the structure of device of slant connecting rod and straight rod, improve the rigidity of the gate, ease the movement of the gate, and reduce the noise. It was exactly to realize this object that in the technical solution was used the Htype cross-section bushing at the connection of the pin shafts and the straight rods of the gate to enable the pin shafts to glide as or rotate on the protruding edge of the concave groove of the straight rods, and to effectively fill in the mechanic gap between the main movable parts of the entire gate. Besides, use of said H-type bushing in the invention patent in suit made it easy to assemble, improved the rigidity of the entire gate, ensured smooth movement, and reduced the noise. In this way it realized the object of the invention patent. By contrast, reference 1 was to resolve the problem of requiring a lot of parts for a gate having folding plates and need for hand riveting in assemblage. It did not have the distinctive technical feature of the invention patent in suit, so it obviously did not have the technical effect, either. Reference 2 described a wheel device placed in the middle of courtyard railings, While the H-type cross-section gliding casing was also used in said device, it purported to facilitate the pin shaft to glide on the additional device of the gate, namely the two C-shaped rods or poles on the middle wheels and co-ordinate with the lock-in device of said C-shaped poles, and reduce the load of the gate to ease the opening and closing of the railing gate, and make the wheels endurable. Thus, the inert clamp-on gate invention patent in suit was quite different from the prior art in object of invention. For that reason, the technical solution used was substantially distinct, with different technical effect. Accordingly, the technical solution of the inert clamp-on gate invention, as compared with the prior art with all its technical solution, object of invention, and technical effect, obviously had its won prominent substantive feature.

Holding

The technical solution of the invention of inert clamp-on gate possessed prominent substantive features as shown by the comparison of it with the prior art, with account also taken of its object and the technical effect.