The Scope of Legal Protection of a Utility Model

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Abstract

As is known, the scope of legal protection of a utility model is determined by its formula. The utility model formula should clearly express the essence of the utility model, which is determined by a set of essential characteristics sufficient to solve the technical problem and allow for its technical result. However, often the authors of a patent application include in the utility model formula not merely a set of essential characteristics but also other characteristics that are not required to solve the technical problem and to achieve the technical result, indicated by the applicant. Such nonessential characteristics are superfluous, reducing the scope of legal protection of the patented utility model. The utility models, containing the insignificant characteristics in the formula, which restrict the rights of the patentees to protect their rights in case of unauthorized use of the utility model, are considered in this article. The results of the study are illustrated by the specific example from judicial practice.

Keywords: utility model, patentee, exclusive right, legal and illegal use, intellectual property rights protection.

1. Introduction

When drawing up a utility model formula, the adverse for the potential patentee consequences of the wrong choice of both the object of patenting and its legal scope are not taken into account as a rule. According to Pantaleev, “most often, in the drawing up of the formula, this circumstance is simply given insufficient attention” [1, p. 34]. These consequences are revealed when there is a need to protect the rights to a patented technical solution. The patentee is quite confident of his win and without any doubt submits a claim to the tribunal in anticipation of the recovery of a good round sum of damages for infringement of exclusive rights. However, to the great disappointment of the patentee, the court refuses to satisfy the claim of the plaintiff due to the absence of infringement of the patent rights.

Let us turn to the regulatory framework to identify the common mistakes in the preparation of the patent application, in particular, the utility model formula.

The utility model formula is one of the five documents included in the patent application and it is regulated by a number of requirements defined in the Civil Code of the Russian Federation (hereinafter – the CC RF) [2], as well as the secondary regulations: the Rules for Compiling, Filing and Reviewing Documents That Are the Basis for the Performance of Legally Significant Actions on the State Registration of Utility Models, and Their Form (hereinafter – the UM Rules) [3, p. 37] and the Requirements for the Documents of the Patent Application for a Utility Model (hereinafter – UM Requirements) [4, pp. 39-40]. The analysis of these requirements is carried out in the scientific works of the team of authors edited by Abova et al. [5, comments to Art. 1225-1228, 1345-1369, 1374-1394, 1398-1400] and the team of authors, edited by Bliznets [6, Ch. 8].

According to para. 2 of Art. 1376 of the CC RF, “the utility model application shall contain the utility model formula, relating to a single technical solution, clearly expressing its essence and fully based on its description”. It follows from this rule that one of the most important requirements for the formula is that it must clearly express the essence of the utility model. The definition of the essence of a technical solution is provided in the UM Rules and the UM Requirements, in particular, the essence of a utility model as a technical solution is expressed in the combination of essential characteristics, sufficient for the solution of the technical problem, indicated by the applicant, and achievement of the technical result, provided by the utility model (para. 35, UM Requirements). Thus, the essential characteristics of a technical solution are such characteristics that affect the possibility of solving the technical problem, indicated by the applicant, and achievement of the technical result, provided by the utility model, i.e. they are in the cause-and-effect relation with the indicated result (para. 35, UM Requirements).

It follows that the utility model formula must contain a set of essential characteristics. The question now arises of whether a formula should contain the nonessential characteristics that do not affect the achievement of a technical result?

The normative documents have no direct norm prohibiting the content of nonessential characteristics in the formula. However, for the utility model there is such an indirect rule, since one of the conditions for its patentability, namely, the novelty, is determined in accordance with the law as follows: “A utility model is deemed new if the set of its essential characteristics is not known from the state of the art” (para. 2, Art. 1351, CC RF). Consequently, the novelty of the utility model is determined by the novelty of the totality of its essential characteristics. Therefore, it is useless to include the inessential characteristics in the utility model formula for they are unable to prevent the recognition of the utility model as known from the state of the art, i.e. not new.

But often the authors of the utility model formula include the insignificant characteristics in it, the presence of which plays a...
negative role in violation of the exclusive right to the patented utility model. It should be noted that the authors can include nonessential characteristics in the utility model formula, including the initial part of the formula, which defines the generic concept, representing the purpose of the claimed technical solution. At the same time, the state of the art may change to determine the patentability of such a technical solution to circumvent the opposing technical solutions. But the possibility of protection of the infringed patent rights also can be reduced by such actions, since any inclusion of nonessential characteristics in the formula certainly reduces the scope of legal protection for the patented technical solution [7, p. 87].

On the basis of para. 2, Art. 1354 of the CC RF, "Protection of intellectual property rights for an invention or utility model is granted based on a patent in the amount determined by the formula of the invention or the utility model contained in the patent". The description and the drawings can be used to interpret the formula of invention and the utility model formula.

The intellectual property rights to utility models are the patent rights and they include the exclusive right, the right of authorship, the right to remuneration for service utility models (Article 1345 of the Civil Code of the Russian Federation). The rightholder can not only use the patented utility model, but also dispose of the exclusive right to it in the amount determined by the utility model formula contained in the patent. Moreover, the disposal of the exclusive right includes the authorization and prohibition to other persons of the use of a utility model by virtue of the para. 1. Art. 1229 of the Civil Code of the Russian Federation: "The rightholder may, at his own discretion, authorize or prohibit other persons from using the result of intellectual activity or the means of individualization. The absence of a prohibition is not considered consent (authorization)".

When revealing the fact of use of a utility model, the norm of para. 3, Art. 1358 of the Civil Code of the Russian Federation "A utility model is recognized as being used in a product if the product contains each characteristic of the utility model given in an independent claim of the utility model formula contained in the patent" is applied. This means that when using a utility model, the product must contain the entire set of characteristics of the claim of the independent utility model formula (i.e., each characteristic of an independent claim of the formula). This position was expressed by many researchers of the utility model, in particular, by Dzhermakyan [8, p. 45; 9, p. 17] and Borovskiy [10, p. 40].

Thus, if, for any reason, the independent claim of the formula contains, in addition to the mandatory set of essential characteristics, the nonessential ones, i.e. the "superfluous" characteristics, it is most likely that such "superfluous" characteristics will not be contained in the product under investigation. Consequently, the utility model will also not be recognized as being used in this product. And if the utility model is recognized as not used, it is impossible to conclude that the rights of the patent holder have been violated. Accordingly, the patent owner will not be able to protect the violated rights and recover damages from the defendant.

Next, let us consider a practical example of an incorrect compilation of a utility model formula, where the applicant "tried to kill two birds with one stone", and was greatly disappointed as a result. In the oil and gas industry, the so-called centralizers are used in drilling equipment, which are intended for centering the casing columns while lowering and cementing them in a well, uniform formation of the paste matrix in the annular space in order to avoid the flow of gases and fluids. Moreover, the centralizers are "floating" (free longitudinal and rotational movement of the centralizer relative to the casing is allowed) and with a rigid fixation on the casing, which excludes any free movement of the centralizer.

The patentee of the patented utility model "Rigid centralizer for a casing column" [11] filed a lawsuit against the companies producing and using in the industry centralizers in which, in the plainly-tiff's opinion, a utility model was used with the following formula including one independent claim 1 and one dependent claim 2:

1. A rigid centralizer for a casing column, comprising a housing in the form of two rings with centering elements and with windows designed to drive the retaining elements in the form of a wedge through them into grooves made from the inner side of the rings to secure the centralizer to the casing column, characterized in that the centering elements are of convex spheroidal shape, in an amount of not less than four units, and are made all-in-one piece with the rings by casting, disposed obliquely spirally, while the windows for the retaining wedges are made on both end parts of one of the centering elements, and the grooves for retaining wedges are made on both sides of the windows and are equal by length to the length of the retaining wedges.

2. According to claim 1, a rigid centralizer is characterized by that the locking elements are made in the form of a one-sided wedge with fixing serrated notches on its inclined surface in the longitudinal direction in an amount of not less than four units, calculated as two wedges for each window, for driving them in opposite directions to the "flush" position.

A judicial patent and technical examination was appointed by the court decision, as a result of which it was revealed that the product - "Floating centralizer "FLOATERS" did not contain seven characteristics of the independent claim of the patented utility model: No. 1 "A Rigid centralizer for a casing column", No. 4 "with windows designed to drive the retaining elements", No. 5 "in the form of a wedge through them", No. 6 "into grooves", No. 7 "made from the inner side of the rings to secure the centralizer to the casing column", No. 13 "while the windows for the retaining wedges are made on both end parts of one of the centering elements", No. 14 "and the grooves for retaining wedges are made on both sides of the windows", No. 15 "and are equal by length to the length of the retaining wedges".

The plaintiff filed to the court the Comments on the Expert Opinion, which reported:

"In the utility model formula, the independent claim is as follows: "A rigid centralizer for a casing column, comprising a body in the form of two rings with centering elements ... " ... the centering elements are made of convex spheroidal shapes in an amount of not less than four units and are made all-in-one-piece with the rings by casting, disposed obliquely spirally". This claim expresses the essence of the utility model, without the presence of the indicated characteristic, the centralizer ceases to be a centralizer – it does not fulfill its technical purpose: it does not center the column, does not turbulize the flow of liquid, does not facilitate the release of the casing, does not ensure the reliability of the support, as well as the quality and long-term separation of the seams. The centralizer can be fixed rigidly to the casing column, and the choice of one or another method of fixation to the body of the column – rigidly or with the freedom of rotation and movement along the body of the casing column, – does not prevent the centralizer from being a centralizer and fulfilling its technological purpose. The system of fixation of the centralizers to the body of the casing column is selected based on the method of cementation of the casing column – with rotation or without it. If the casing column cementation is planned to be performed without rotation, then the centralizer is fixed to the body of the column rigidly with the aid of retaining wedges. In the case of casing column cementation with rotation, the centralizer is not fixed to the body of the column rigidly and it has the freedom of rotation and movement along the casing body and the centralizer becomes "floating". In this case, the casing columns are equipped with the centralizers without being attached to the pipes of the casing columns or are attached to the casing columns by means of retaining rings, with freedom of rotation and movement between the casing collars or between the retaining rings. Therefore, the items of the utility model formula that characterize a particular case of using the utility model and are dependent "... with windows designed to drive the retaining elements in the form of a wedge through them into grooves made from the inner side of the rings to secure the cen-
eralizer to the casing column...”, “while the windows for the retaining wedges are made on both end parts of one of the centering elements, and the grooves for retaining wedges are made on both sides of the windows and are equal by length to the length of the retaining wedges”, namely the way the centralizer is rigidly attached to the body of the pipe, must be considered as dependent and nonessential in the multipart patent formula for the utility model. Thus, in accordance with the classification of characteristics of a utility model, set forth by the expert in the Opinion, I consider independent the characteristics No. 1-3 and No. 8-12, without which the centralizer ceases to be a centralizer and does not fulfill its direct purpose. All other characteristics relating to the method of fixation of the centralizers (No. 4-7 and No.13-15) are dependent. Thus, I believe that the expert opinion has been made with errors and either the adjustment of this expert opinion, taking into account my remarks, or the appointment of a new examination are required.

At the Plaintiff’s Comments on the Expert Opinion, the expert filed to the court the Response, in which the grounded criticism was given in the following form:

“The formulation of the question of the court when appointing a judicial patent technical expertise fully meets the requirement of para. 3, Art. 1358 of the Civil Code of the Russian Federation for recognizing the utility model used in the product. In accordance with this rule, the expert in the study is required to identify the presence or absence in the product “FLOATERS” of each characteristic, included in the independent claim of the patented utility model. In accordance with the Administrative Regulations [12, para. 9.8.1.2], effective as of the filing date of the utility model application, “The multiclaim formula is used to describe one utility model with the development and/or refinement of the totality of its characteristics in relation to particular cases of implementation or use of the utility model or for the specification of a group of utility models. A multiclaim formula characterizing one utility model has one independent and one or more subsequent dependent claims”.

The formula of the utility model under study is multiclaim and has one independent claim and one dependent claim. In the Judicial Expert Opinion (hereinafter referred to as the Opinion), the expert, in accordance with the question of the court, identified each characteristic given in the independent claim of the utility model formula (characteristics in total).

It should be noted that neither the question of the court nor the requirements of para. 3, Art. 1358 of the CC RF do not divide the indications of an independent utility model claim into any categories, including the essential and nonessential characteristics, dependent and non-dependent characteristics, as in accordance with para. 9.8.1.4 (1) of the Administrative Regulations [12] “The independent claim of the utility model formula describes the utility model by the totality of its characteristics that determines the amount of legal protection sought and is presented in the form of a logical definition of the utility model object”. That is why to recognize the use of the utility model in the product, para. 3, Art. 1358 of the CC RF requires to prove the content of each characteristic in this product, i.e. the whole set of characteristics of an independent claim, which determines the scope of legal protection of the patented utility model. The exclusion of a characteristic from an independent claim of a utility model (as not an essential or dependent feature, as it was done in the Plaintiff’s Comments) entails the improper extension of the patent protection scope of the utility model.

In the Opinion, the expert answers the question posed by the court: “In the manufacture of the “Floating Centralizer “FLOATERS”, each and every characteristic of the independent claim of the utility model formula of the patent “Rigid centralizer for a casing column” is not used. As follows from the conclusion, the product does not contain many characteristics. As for the first characteristic of the independent formula for the utility model “Rigid centralizer for a casing column”, the following should be noted. In the utility model formula and in its description, there is no indication of the possibility and necessity of using a patented centralizer as the “floating” one, i.e. having the purpose of centering the casing pipe without rigid fixation of it on the casing pipe. On the contrary, the formula and the description of the utility model clearly indicate the need for a rigid reliable fixation of the centralizer on the casing pipe, which does not allow any displacement of the centralizer relative to the casing pipe. For example, the formula contains all characteristics to ensure a rigid fixation of the centralizer on the casing pipe, and the description says: “The objective set is solved by the described rigid centralizer for a casing column, comprising a housing in the form of two rings with centering elements and with windows designed to drive the locking elements in the form of a wedge through them into the grooves made on the inner side of the rings to fix the centralizer to the pipe of the casing column”.

- “In the rings on both ends of one of the centering elements, the windows are designed to drive the retaining wedges through them into the grooves made on both sides of the windows and along the length equal to the length of the retaining wedges intended to secure the centralizer to the casing column pipe (the grooves are marked with dot-dash lines)”.

- “Prior to lowering of the casing column into the well, the centralizers are put on the casing pipes and fixed with the retaining wedges”.

- “It is defined by the bench tests that the most reliable fixation of the centralizer is achieved when two retaining wedges are driven through each window in opposite directions to the “flush” position”.

Therefore, it follows from the patent that the patented centralizer is intended for centering the casing pipe with rigid fixation and is not intended for centering the casing pipe without a rigid fixation on it in the “floating” version, i.e. with the possibility of displacement of the casing pipe with respect to the centralizer.

In the Plaintiff’s Comments on the Opinion, the Plaintiff reports that the patented centralizer can also be used in the floating mode without a rigid fixation on the pipe. However, for this use of a patented centralizer, the following patented characteristics of the independent utility model claim are not required: No. 1 “A Rigid centralizer for a casing column”. No. 4 “with windows designed to drive the retaining elements”, No. 5 “in the form of a wedge through them”, No. 6 “into grooves”, No. 7 “made from the inner side of the rings to secure the centralizer to the casing column”, No. 13 “while the windows for the retaining wedges are made on both end parts of one of the centering elements”, No. 14 “and the grooves for retaining wedges are made on both sides of the windows”, No. 15 “and are equal by length to the length of the retaining wedges”.

These particular indications of an independent claim of a utility model are not contained in the product – “Floating Centralizer “FLOATERS”, which is registered in the “Protocol for the examination of the object of the expert examination in the court case, signed by all the inspection participants, including the Plaintiff and his representatives” (in the Appendix to the Opinion).

As it was noted above by the expert, the ignoring of these patented characteristics of the utility model violates (exceeds) the amount of legal protection provided by the state to the patentee when granting him a patent (the registration of the utility model in the State Register of Utility Models). This will be another utility model that does not contain any characteristics intended for rigid fixation of the centralizer on the casing pipe. That is, as the plaintiff notes, “the centralizer does not cease to be a centralizer and does not cease to fulfill its main technological purpose”, but the objective set by the applicant of this utility model, indicated in the description of the utility model, will not be solved, as the Plaintiff, acting as the applicant, reported in the description of the utility model: “The task is solved …” – see above! Therefore, in the Opinion, the expert concluded that the first characteristic of the independent claim of the utility model is not contained in the product under investigation – “Floating centralizer “FLOATERS”.

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Upon the receipt of the quoted Answer from the expert on the Plaintiff’s Comments by the court and the Plaintiff, the case examined by the court resulted in the Plaintiff’s refusal of the claim. This example clearly shows that when drawing up the utility model formula, as well as the claims, it is necessary to define clearly the essence of the technical solution and include in the independent claim only a set of essential characteristics sufficient to achieve the technical result of the technical solution specified by the applicant. The inclusion of any nonessential, i.e. “superfluous” characteristic in the independent claim will unambiguously reduce the scope of legal protection of the patented technical solution, and the future patentee of such a technical solution, in particular, a utility model, will not be able to exercise fully his intellectual rights.

If, in the example considered, the plaintiff, acting as the applicant, had included all the “superfluous” (nonessential) characteristics into the independent claims, he would have significantly expanded the scope of the legal protection of his utility model and would have actually implemented the protection of the patented technical solution, even if in addition to all the essential characteristics, the product will contain the characteristics required to securely the centralizer on the casing pipe.

References

[3] Pravila sostavleniya, podachi i rasmotreniya dokumentov, yavllyaushchikhsya osnovaniem dlya soversheniya yuridicheskoi znachimynkh deistvi po gosudarstvennoi registratsii poleznykh modelei, i ikh formy [Rules for compiling, filing and reviewing documents that are the basis for the performance of legally significant actions on the state registration of utility models, and their form], 2015.
[8] V.Y. Dzhermakyan, Ne kazhdyi priznak, zapisannyi v formule izobreteniya, otosnosiya k priznakam zapatentovannogo izobreteniya [Not Every Characteristic Recorded in the Claims Relates to the Characteristics of a Patented Invention], Patentnii povernii 1 (2016) 45.
[12] Administrativnyi reglament ispolnienia Federalnoi sluzhboi po intellektualnoi sobstvennosti, patentam i tovarnym znakam gosudarstvennogo funktsii po organizatsii priema zayavok na poleznuyu model i ikh rasmotreniya, ekspertizy i vydachi v ustavovlennom poryadke patentov Rossissko Federatsii na poleznuyu model [The administrative regulations for the execution by the Federal service for Intellectual property, patents and trademarks of the state function on receipt of the utility model applications and their examination, consideration and issuance of patents of the Russian Federation for a utility model in accordance with the established procedure], 2008.