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Oslo, 2021.09.30

Your ref.:
Application no.: 20210273 (please include in your reply)
Applicant: KNUT CHRISTIAN BRINCH
Due date: 2022.03.30

Office action in patent application no. 20210273

Basis of the opinion

Description received 2021.03.02
Claims received 2021.03.02
Drawings received 2021.03.02

Conclusion

The application discloses features that may be patentable, but the present patent claims are not clearly defined. Final assessment of patentability is therefore postponed until valid claims are submitted.

Results of the novelty search

Reference is made to the following documents:

D1: JP 3201988 U
D2: CN 204783875 U
D3: WO 2015015526 A1

Significant deficiencies of relevance for the assessment of patentability

Independent claim 1 refers to "means for circulating fluid in a non-resistive manner". Similarly, independent claim 17 refers to "...starting a non-resistive circulation of fluid...". The "non-resistive" term is understood to represent the core of the invention, as disclosed in the description and the figures. These references in the claims are however too vague to accurately define the scope of invention for which protection is applied.

While it is acceptable to seek support in the description for interpreting the claims, the claims should nevertheless provide an accurate definition of the scope of invention in terms of technical features. We cannot see this being the case for the current claims. The following assessment is therefore based on the application as a whole and not specifically targeted towards the claims.

Under the heading "Terminology", the terms "resistive" and "non-resistive" are defined as whether particles in a circulation circuit are influenced by gravity or not. According to common laws of nature, all particles with a non-zero mass will be affected by gravity in presence of a gravitational field. While the particles may be subjected to other, oppositely directed, forces in such a way the net force on the particle becomes zero, the particle is still influenced by gravity. It is not clear if "resistive" and "non-resistive" should be interpreted

as “no net influence”, or as some sort of perpetuum mobile not obeying the common laws of nature.

Further, “circulation” is defined as all forms for movement or flow in a “circuit”, which again is defined as all paths or routes between at least two points. These definitions appear to include the case of transferring fluid from one container to another, in the sense of emptying the first container, and filling up the second. Based on the description and the drawings we cannot see how this is possible. According to our understanding of the invention, fluid is first circulated (in the common sense of the word in a closed loop) between a first container and a closed intermediate container, thus gradually exchanging fluid between the containers. Subsequently fluid is circulated in a similar manner between the intermediate container and the second container. The net effect of these two cycles is that equal amount of fluid is exchanged between the first and the second container, while maintaining the amount of fluid in all containers.

In order to maintain circulation between two containers, a double set of conveyors/pipes is required as indicate in the figures. The start/stop mechanisms – or valves – appear to open/close both conveyors simultaneously, but this is not explicitly disclosed.

For a patent to be granted, the invention should be disclosed sufficiently clearly to allow a person skilled in the art to reproduce the invention without experimentation or exercising inventive skills. Further, the claims should clearly and unequivocally include all essential technical features required to make the invention work as intended, thus defining the scope of protection, cf. Norwegian Patents Act, Section 8, second paragraph. For the reasons mentioned above, these criteria are not fulfilled in case of the current patent claims.

The claimed invention should not contravene the commonly accepted laws of nature. Our interpretation of the principle behind the invention, i.e. circulating fluid between two containers without any net transport of mass, and supplying energy to overcome frictional losses, appear to be acceptable in this respect. If, however any effect claiming to eliminate the influence of gravity, or otherwise provide a net transport of mass to a higher elevation is intended, this will prohibit a grant of patent, cf. Norwegian Patents Act, Section 1, first paragraph regarding industrial applicability.

Assessment of patentability

The following is a reasoned statement with regard to novelty and inventive step, ref. Norwegian Patents Act, Section 2, first paragraph.

Novelty

We consider D1 to represent the closest prior art, disclosing a circulation system for water. The system comprises three containers, with double conduits running between a first container and an intermediate container, as well as between said intermediate container and a second container; see the figures and abstract. Means for controlling flow or means for starting circulation is not disclosed. It is therefore possible to draft a new independent patent claim which fulfils the criterion for novelty.

Inventive step

None of the prior art documents D1-D3 disclose all technical features according to the description and drawings in the current application. A person skilled in the art would not combine technical features from prior art and arrive at a system comprising all the technical

features disclosed in the present application. It should therefore be possible to draft a new independent claim fulfilling the criterion for inventive step.

Certain defects and observations

Reference is made to the section "Significant deficiencies of relevance for the assessment of patentability"

Other potential defects will be assessed if the application is continued.

Instructions

You are invited amend the application and/or to discuss our assessment within the specified time limit (see below).

The description and particularly the claims should be amended according to the assessment given above.

While all parts of an application may be amended, it should in particular be pointed out that no new technical features may be added to the original application. This is covered by the Norwegian Patents Act, Section 13: *"A patent application must not be amended in such a way that protection is claimed for subject matter which was not disclosed in the application at the time it was filed."*

If you amend the patent claims, you must state where in the application as filed support for the amendment is found, ref. Regulations to the Norwegian Patents Act (Patent Regulations), Section 20.

If you file an amended description, you must specify which parts of the description are not in accordance with the previously filed description and specify in which way the amendments imply anything new with respect to the substantive content, ref. Patent Regulations, Section 21.

Time limit for response

You are invited to submit a written response within the due date above. You may respond via [Altinn](#). If you fail to respond, the application will be shelved. However, the processing of the application may be resumed by paying a fee. Ref. Norwegian Patents Act, Section 15, third paragraph and Regulation Relating to Payments etc. to the Norwegian Industrial Property Office and the Board of Appeal for Industrial Property Rights (Regulation on fees), Section 26. You may request an extension of the due date, see «patentretningslinjene del A, kap. I, punkt 5.1» Examination Guidelines, part A, Chapter I, 5.1 (in Norwegian only). This must be done within the due date.

For general provisions regarding submitting of documents and payments, see Regulation on fees, Sections 1-6 and 8.

Additional information to the applicant

Application documents in English - provisional protection

The patent application will be published 18 months after it was first submitted. In order to obtain provisional protection for the invention described in the application from the publishing date, you must submit a translation of the claims into Norwegian. The patent claims in Norwegian will form the basis for provisional protection during the application period. The provisional protection applies only insofar as the Norwegian and English texts

correspond with each other. Provisional protection takes effect once you have supplied a translation of the claims and we have published a notice of this in the Norwegian Official Patent Gazette (Norsk patenttidende).

For the application to be approved for grant of patent you must submit a translation into Norwegian of the approved claims, see Norwegian Patents Act, Section 21, third paragraph and Patent Regulations, Section 33a.

Information about patenting abroad

If your intention is to apply for patent abroad, please be aware of the following:

1. You can apply for patent abroad with priority from the Norwegian application within 12 months from the date it was filed in Norway (the priority year). This means that the patent application filed abroad gets the same effective filing date as the application has in Norway. If anyone else has applied for a similar patent during the priority year, your patent application will precede due to its older priority.
2. You may claim priority from this application (the priority application) at the time you file the application abroad, or within 16 months from the Norwegian filing date and at the latest within four (4) months after filing abroad. You must also submit a certificate of priority. The Norwegian Industrial Property Office issues such a certificate of priority on demand if a set fee is paid.

For your information

Relevant laws and regulations, as well as Examination Guidelines are available on our webpage, www.nipo.no.

Information to applicants using Altinn: You will find cited publications linked in the enclosed search report or as electronic attachments. They will be forwarded in paper format only if not available in electronic format or if protected by copyright.

Please contact us if you have any questions

Sincerely,

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