

Internal distribution code:

- (A) [-] Publication in OJ
- (B) [-] To Chairmen and Members
- (C) [-] To Chairmen
- (D) [X] No distribution

**Datasheet for the decision
of 9 April 2024**

Case Number: T 0418/22 - 3.5.02

Application Number: 09828699.0

Publication Number: 2356730

IPC: H02J7/00, E21F13/00, B60L11/18,
B60K6/00, H02J3/32

Language of the proceedings: EN

Title of invention:

Method for using mining vehicle, arrangement in mine, rock drilling rick, and mining vehicle

Patent Proprietor:

Sandvik Mining and Construction Oy

Opponent:

Epiroc Rock Drills Aktiebolag

Relevant legal provisions:

RPBA 2020 Art. 13(2), 16(1)(a)
EPC Art. 54(2), 56

Keyword:

Amendment after summons - exceptional circumstances - main request and auxiliary requests 1 and 2 - (no)
Novelty - main request (no) - auxiliary request 1 (no)
Inventive step - auxiliary request 2 (no)



Beschwerdekammern
Boards of Appeal
Chambres de recours

Boards of Appeal of the
European Patent Office
Richard-Reitzner-Allee 8
85540 Haar
GERMANY
Tel. +49 (0)89 2399-0
Fax +49 (0)89 2399-4465

Case Number: T 0418/22 - 3.5.02

D E C I S I O N
of Technical Board of Appeal 3.5.02
of 9 April 2024

Appellant: Sandvik Mining and Construction Oy
(Patent Proprietor) Pihtisulunkatu 9
33330 Tampere (FI)

Representative: Papula Oy
P.O. Box 981
00101 Helsinki (FI)

Appellant: Epiroc Rock Drills Aktiebolag
(Opponent) 701 91 Örebro (SE)

Representative: Valea AB
Box 1098
405 23 Göteborg (SE)

Decision under appeal: Interlocutory decision of the Opposition
Division of the European Patent Office posted on
13 December 2021 concerning maintenance of the
European Patent No. 2356730 in amended form.

Composition of the Board:

Chairman R. Lord
Members: H. Bronold
D. Prietzel-Funk

Summary of Facts and Submissions

I. The appeals of the patent proprietor and of the opponent are against the interlocutory decision of the opposition division with which it was found that European patent No. 2 356 730 in amended form according to the then first auxiliary request met the requirements of the EPC.

The opposition division *inter alia* reached the conclusion that claim 1 according to the first auxiliary request was not rendered obvious by a combination of documents D19 (PICKERING, R.G.B. and LEON, F. "The implementation of mechanized breast mining and the development of XLP equipment.", Third International Platinum Conference 'Platinum in Transformation', The Southern African Institute of Mining and Metallurgy, 2008) and D4 (WO 2006/135303 A1).

II. The patent proprietor requested that the decision under appeal be set aside and that the patent be maintained in amended form on the basis of the main request or on the basis of one of auxiliary requests 1 or 2, the latter corresponding to the auxiliary request held allowable in the decision under appeal. The board interprets auxiliary request 2 as a request to dismiss the opponent's appeal.

III. The opponent requested that the decision under appeal be set aside and that the European patent be revoked. Moreover, the opponent requested that auxiliary request 1 not be admitted into the appeal proceedings because it corresponded to the new first auxiliary request that

was filed during the oral proceedings before the opposition division but which the opposition division did not admit.

- IV. In a communication under Article 15(1) RPBA the board informed the parties *inter alia* that it tended to consider document D19 to have been made publicly available during the Third International Platinum Conference. The board was also inclined to agree with the opponent that the subject-matter of claim 1 according to the main request and according to auxiliary request 1 lacked novelty over the disclosure of document D19. Further the board tended to the opinion that the subject-matter of claim 1 according to auxiliary request 2 lacked an inventive step over a combination of document D19 with document D4.
- V. With letter dated 7 February 2024 the patent proprietor filed for the first time in the appeal proceedings arguments concerning the public availability of document D19 during the Third International Platinum Conference, concerning novelty of claim 1 according to the main request and according to auxiliary request 1 over the disclosure of document D19 as well as new arguments regarding inventive step of the subject-matter of claim 1 according to auxiliary request 2 over the combination of documents D19 and D4.
- VI. The opponent requested with letter dated 29 February 2024 that the amendments to the patent proprietor's appeal case not be taken into account in the appeal proceedings.
- VII. Oral proceedings before the board took place on 9 April 2024.

VIII. In the oral proceedings before the board the opponent requested for the first time that additional costs incurred for the necessary rejoinder to the patent proprietor's late-filed letters dated 7 February 2024 and 13 March 2024 (100%) and for the opponent's work in preparation for the oral proceedings before the board (75%) be apportioned to the patent proprietor.

IX. Claim 1 according to the main request reads as follows:

X. " A method for using a rock drilling rig (1), comprising:
performing with at least one rock drilling machine (11) in the rock drilling rig (1) tasks according to a drilling work cycle defined in an excavation plan at a work site (19) according to the excavation plan,
connecting the rock drilling rig (1) at the work site (19) to an external electrical network (20) for supplying the required working energy, and
performing after the drilling work cycle at the work site a transfer drive (29) for moving the rock drilling rig (1) between work sites,
characterised by
using an energy storage (26) located in the rock drilling rig (1) for supplying electric current to driving equipment (4) and to serve as energy source during the transfer drive (29) for moving the rock drilling rig (1) between work sites (19) without a combustion engine or connection to an external electrical network (20), and
charging said energy storage (26) with electricity obtained from the external electrical network (20) simultaneously during the drilling work cycle at the work site."

XI. Claim 1 according to auxiliary request 1 is identical to claim 1 according to the main request.

XII. Claim 1 according to auxiliary request 2 differs from claim 1 according to the main request in the following additional feature:

"determining the electrical power requirement caused by the drilling work cycle and adjusting the charging power of the energy storage (26) in relation to the input power of the drilling work cycle."

XIII. The arguments of the parties relevant for the decision are dealt with below together with the grounds for the decision.

Reasons for the Decision

Main request

1. Amendments to the patent proprietor's appeal - Article 13(2) RPBA
- 1.1 Public availability of document D19

With their letter dated 7 February 2024 the patent proprietor for the first time during the appeal proceedings provided arguments why document D19 was not made available to the public during the Third International Platinum Conference between 5 and 9 October 2008.

The opponent requested that these arguments not be taken into account under Article 13(2) RPBA as they represented an amendment of the patent proprietor's appeal case for which there were no exceptional circumstances justified with cogent reasons.

The patent proprietor argued that several exceptional circumstances in the sense of Article 13(2) RPBA existed.

They argued that the appearance of D19 in the preliminary opinion of the board under Article 15(1) RPBA as allegedly novelty-destroying for the main request was a new development. The board disagrees. As correctly pointed out by the opponent they had already in their reply to the patent proprietor's appeal formulated an explicit objection of lack of novelty

against independent claim 1 of the main request based on document D19 in section D.2.4.6. The fact that this objection is contained in the section dealing with auxiliary request 1 is irrelevant because claim 1 according to auxiliary request 1 is identical to claim 1 according to the main request.

The further argument of the patent proprietor that it was unclear what D19 exactly was does not convince the board either. The question as to what the content of D19 was has no bearing on the fact that the patent proprietor has not contested the public availability of D19 until their letter dated 7 February 2024. Thus, a discussion of the content of D19 could have taken place only if it were found that the corresponding arguments presented in the letter dated 7 February 2024 have to be taken into account in the appeal proceedings. However, according to the arguments presented by the parties, the board concluded that this was not the case.

Moreover, contrary to what the patent proprietor argued, no exceptional circumstances can be considered to be based on the fact that the public availability of document D19 had been discussed by both parties in length in various infringement proceedings regarding the patent at hand pending before national courts or during the opposition proceedings before the EPO. It is also not relevant for the question whether the new arguments regarding public availability should be taken into consideration that the content of document D19 did not come as a surprise for the opponent. The decisive criterion is whether the new arguments constitute an amendment of the patent proprietor's appeal case. The arguments exchanged or the facts presented in other proceedings have no bearing on the question whether

there has been an amendment to a party's appeal case as defined in Article 12(1) RPBA.

Further, contrary to the patent proprietor's arguments, no exceptional circumstances lie in the fact that document D19 was allegedly presented only shortly before the oral proceedings before the opposition division. Firstly, D19 was filed almost 3 months before the oral proceedings and in reaction to the preliminary opinion of the opposition division. Thus, the filing of D19 constitutes an appropriate procedural reaction of the opponent filed in due time. Even if D19 was considered to be filed at short notice, no reason is apparent to the board, and none was presented by the patent proprietor, why a corresponding reply of the patent proprietor could not have been filed with their grounds of appeal or with their reply to the opponent's appeal at the latest.

The board therefore concluded that the submissions of the patent proprietor in the letter of 7 February 2024 concerning the distribution of D19 at the conference represent an amendment to their appeal case and that no exceptional circumstances within the meaning of Article 13(2) RPBA exist which could justify their being taken into account.

1.2 New arguments regarding novelty of the main request over D19

With respect to their new arguments concerning novelty of claim 1 of the main request over D19 the patent proprietor argued in identical manner as with respect to the new arguments concerning distribution of document D19 at the above-mentioned conference. In this

respect the board's above conclusion thus applies *mutatis mutandis*.

In addition, the patent proprietor brought forward that the new submissions did not constitute an amendment of their appeal case because in their statement of grounds of appeal in section 2.2 in the second but last paragraph they had argued that *"No prior art has been cited that would suggest or hint at charging the energy storage with electricity obtained from the external electrical network simultaneously during the drilling work cycle at the work site."* This statement obviously included document D19 because "No prior art document" encompassed all documents on file.

However, as pointed out by the opponent, the patent proprietor's statement regarding "No prior art" is just an unsubstantiated assertion and cannot be regarded as encompassing the new arguments presented with letter dated 7 February 2024 without being regarded as an amendment in the sense of Article 13(2) RPBA.

The board therefore concluded that the submissions of the patent proprietor in the letter of 7 February 2024 concerning novelty over document D19 represent an amendment to their appeal case and that no exceptional circumstances within the meaning of Article 13(2) RPBA exist which could justify their being taken into account.

2. Novelty over document D19 - Article 54(2) EPC

Given the board's conclusion in section 2.1 above, and given that prior to the letter of 7 February 2024 the patent proprietor had not presented any arguments

during the appeal proceedings concerning the question as to whether document D19 was made available to the public by distribution at the conference, the board had no reason to deviate from its preliminary opinion that document D19 formed part of the state of the art.

During the procedure up to the board's communication under Article 15(1) RPBA the patent proprietor had not filed any arguments regarding novelty of claim 1 according to the main request over the disclosure of document D19.

During the oral proceedings before it the board decided not to take into account the patent proprietor's corresponding submissions with letter dated 7 February 2024.

Since thus there were no arguments of the patent proprietor against the objection of lack of novelty of claim 1 of the main request on file the board saw no reason to deviate from its preliminary opinion that the subject matter of claim 1 of the main request lacked novelty over D19.

Therefore, the board concluded that the subject-matter of claim 1 according to the main request lacks novelty in the sense of Article 54(2) EPC.

Consequently, the main request is not allowable.

Auxiliary request 1

3. Novelty over the disclosure of D19 - Article 54(2) EPC

Claim 1 according to auxiliary request 1 is identical to claim 1 according to the main request. Thus, the board's conclusion on claim 1 according to the main request applies *mutatis mutandis* to claim 1 according to auxiliary request 1.

Therefore, the subject-matter of claim 1 according to auxiliary request 1 lacks novelty over the disclosure of document D19.

Consequently, auxiliary request 1 is not allowable.

Auxiliary request 2

4. Amendments to the patent proprietor's appeal - Article 13(2) RPBA

Arguments concerning inventive step of auxiliary request 2 over D19 with D4

The patent proprietor argued that their reply to the opponent's appeal contained in section 5 a reference to the impugned decision which had been favourable for the patent proprietor on the question of inventive step of claim 1 according to auxiliary request 2. According to the patent proprietor it was sufficient for them to point out where they considered the arguments of the opposition division or those of the opponent not to be convincing.

While this assumption of the patent proprietor might be correct, the board cannot identify any reason why this assumption would allow the patent proprietor to amend and expand their appeal case as set out in section 5 of their reply to the opponent's appeal later in the appeal proceedings.

Further, in their reply to the opponent's appeal the patent proprietor had only argued in this context that document D19 was not a suitable starting point for the assessment of inventive step. However, in their letter dated 7 February 2024 they also reacted to the preliminary opinion of the board according to which the objective technical problem was based on paragraph [0015] of the contested patent, which they considered not to be correct.

According to the patent proprietor, this merely amounted to a normal development of the proceedings and did not constitute an amendment of the patent proprietor's appeal case.

The board is not persuaded by this line of argument. As correctly pointed out by the opponent, it was not the board that first raised the argument that the objective technical problem should be based on paragraph [0015], but rather the opponent. Already in their statement setting out the grounds of appeal they had referred to section 39 of the impugned decision. This section contains the opponent's complete first-instance arguments of lack of inventive step of claim 1 according to auxiliary request 2 over a combination of document D19 with document D4 and contains on page 15 in the fifth paragraph a statement that the technical effect provided by the additional feature of claim 1 was given in paragraph [0015] of the opposed patent.

The patent proprietor could therefore have been expected to respond to this argument already in their reply to the opponent's appeal.

Therefore, the board concluded that the submissions of the patent proprietor in the letter of 7 February 2024 concerning inventive step of claim 1 of auxiliary request 2 over D19 represent an amendment to their appeal case and that no exceptional circumstances within the meaning of Article 13(2) RPBA exist which could justify their being taken into account.

5. Inventive step over D19 with D4

Since the board concluded that the submissions of the patent proprietor in the letter of 7 February 2024 concerning inventive step of claim 1 of auxiliary request 2 over D19 are not taken into account in the appeal proceedings, as a direct consequence, the substantial discussion concerning inventive step was limited to the content of the submissions which were already present in the file before the preliminary opinion of the board was sent to the parties.

The patent proprietor's statement of grounds of appeal is completely silent about lack of inventive step of claim 1 according to auxiliary request 2 over a combination of documents D19 and D4. In their reply to the opponent's appeal the patent proprietor merely argued in this context that the skilled person would make use of the idle time of a face drilling machine for charging the batteries, thus that simultaneous charging was not disclosed in D19. Further, D19 contained an explicit statement against providing the rock drilling rig with a battery. Moreover, the rig

according to D4 had no battery for transfer driving and there were neither motivation nor instructions for the skilled person to consider any kind of charging for such a battery, certainly none that would take place in relation to the input power of the drilling work cycle.

During the oral proceedings before the board the patent proprietor argued in addition that the considerations of a customer as presented in D19 were indeed technical considerations and not purely commercial. Therefore, the skilled person would not implement a driving battery in the rock drilling rig according to D19. D19 stated that neither a battery nor a diesel engine for transfer moves were implemented. If anyway the person skilled in the art would have combined D19 with D4, the result would have been a rock drilling rig with a diesel engine because D4 did not disclose a battery for transfer driving.

Although the patent proprietor during the oral proceedings presented a number of arguments concerning the non-implementation of a battery in the rock drilling rig according to D19, these are irrelevant for the question of inventive step of claim 1 according to auxiliary request 2. The board already concluded with respect to the subject-matter of claim 1 according to the main request that using an energy storage located in the rock drilling rig for supplying electric current to driving equipment and to serve as energy source during the transfer drive for moving the rock drilling rig between work sites without a combustion engine or connection to an external electrical network, and charging said energy storage with electricity obtained from the external electrical network simultaneously during the drilling work cycle at the work site, is known from document D19.

Further, because of the irrelevance of said arguments for the questions of inventive step of claim 1, the question whether these arguments are to be taken into account in the appeal proceedings under Article 13(2) RPBA as raised by the opponent can be left open.

As correctly pointed out by the opponent, the only difference between the subject-matter of claim 1 according to auxiliary request 2 and the disclosure of D19 is the additional feature of claim 1 related to charging control. Therefore, all arguments of the patent proprietor questioning whether the rig according to D19 is provided with a battery for moving the rock drilling rig between work sites are moot.

The board thus concludes that the only difference between the subject-matter of claim 1 according to auxiliary request 2 and the disclosure of document D19 is the additional feature distinguishing claim 1 of auxiliary request 2 from claim 1 according to the main request and which reads as follows:

"determining the electrical power requirement caused by the drilling work cycle and adjusting the charging power of the energy storage (26) in relation to the input power of the drilling work cycle."

There was dispute among the parties about the technical effect of this distinguishing feature and whether it is rendered obvious by a combination of documents D19 and D4.

During the oral proceedings before the board the patent proprietor argued that the distinguishing feature had the technical effect that the mining equipment could be

used more efficiently, as stated in paragraph [0009] of the patent. In contrast, the problem stated in paragraph [0015] of the patent, as argued by the opponent, merely referred to an embodiment. Further, document D4 merely taught controlling the power attributed to sub-processes for drilling. Since the overall power available was limited, the person skilled in the art would not consider adding another power consumer to the rig of D4. Even if a battery and a charger were added to the rig of D4, such a battery and charger could not be interpreted to represent a load included in the control strategy of D4 because it did not consume energy but stored it for later usage instead. Moreover, according to D4 the available power was used exclusively for making the drilling process succeed.

The board disagrees.

Firstly, as correctly pointed out by the opponent, the above-mentioned arguments of the patent proprietor even go beyond what they had presented in their letter dated 7 February 2024 and for which the board has arrived at the conclusion that they should not be taken into account in the appeal proceedings because they were already late-filed.

Secondly, even if the patent proprietor's arguments presented during the oral proceedings before the board were taken into account, they are not suitable to establish that the subject-matter of claim 1 is not rendered obvious by a combination of document D19 with D4. Therefore, the question whether these arguments are to be taken into account in the appeal proceedings under Article 13(2) RPBA as raised by the opponent could be left open.

As argued by the opponent, when considering the additional feature of claim 1 according to auxiliary request 2, i.e. the above identified distinguishing feature, the patent proprietor's assumption that paragraph [0015] of the patent is merely directed to an embodiment is no longer valid, because paragraph [0015] deals explicitly with the effects of the additional feature distinguishing the subject-matter of claim 1 over the disclosure over the closest prior art document D19. Therefore, the patent proprietor's assumption that the technical effect of the distinguishing feature would be an increase of efficiency of the mining equipment is incorrect. Consequently, the board agrees with the opponent that the technical effect arising from the distinguishing feature is the one set out explicitly in paragraph [0015] of the patent in correlation with the additional feature, namely *"to balance the load of the electrical network of the mine and avoid its overload"*.

Contrary to the patent proprietor's assumption, document D4 is not limited to avoiding overloading the electricity grid of the mine during drilling by depriving of power those sub-processes which at that moment it deems less critical. As pointed out by the opponent, D4 teaches on page 9, third paragraph that

"Instead of completely shutting down sub-processes it may, in some cases, be advantageous to reduce their available power instead, i.e., they may still continue but in a limited manner."

The board also agrees with the opponent that this disclosure of D4 corresponds exactly to the technical effect as set out in paragraph [0015] of the contested

patent, i.e. to balance the load of the electrical mine and avoid its overload.

To that end D4 further discloses on page 3, third paragraph, to determine

"a parameter value representing a total available power for the rock drilling process, and to control the power distribution between the sub-processes of the rock drilling process such that the total power consumption of the sub-processes does not exceed the total available power."

As argued by the opponent, the disclosure of document D4 corresponds to the content of the distinguishing feature of claim 1 of *"determining the electrical power requirement caused by the drilling work cycle and adjusting the charging power of the energy storage (26) in relation to the input power of the drilling work cycle"*, such that a combination of the disclosures of documents D19 and D4 results in the subject-matter of claim 1.

Because both documents D19 and D4 lie in the same field of rock drilling rigs for mining, the board also agrees with the opponent that the person skilled in the art would have combined both teachings and would have arrived at the subject-matter of claim 1 in an obvious manner.

Consequently, the board concluded that the subject-matter of claim 1 of auxiliary request 2 does not involve an inventive step over the disclosure of document D19 in combination with the disclosure of document D4.

Thus, auxiliary request 2 is not allowable either.

6. Concluding remarks on the substantive case

Since as indicated above the patent proprietor's main request and auxiliary requests 1 and 2 are not allowable, the board accedes to the opponent's request to set aside the decision under appeal and revoke the patent.

7. Apportionment of costs - Article 104(1) EPC and Article 16(1) (a) RPBA

The opponent requested that 100% of the additional costs incurred for the necessary rejoinders to the patent proprietor's late-filed letters dated 7 February 2024 and 13 March 2024 (100%) as well as 75% of the additional costs for the opponent's work in preparation for the oral proceedings before the board (75%) be apportioned to the patent proprietor.

The patent proprietor requested dismissal of this request and submitted that the request was late-filed and also unfounded.

The board agrees with the patent proprietor in this respect.

The opponent argued that they had to spend a considerable number of hours to respond to the patent proprietor's letters dated 7 February 2024 and 13 March 2024, with opponent's letters dated 29 February 2024 and 20 March 2024, respectively. Moreover, their legal counsel for the pending litigation proceedings had to

be consulted such that the pleading was consistent in all proceedings.

The board disagrees that in the present case an apportionment of costs is justified.

Firstly, the opponent's rejoinders dated 29 February 2024 and 20 March 2024 are focused on the question of whether the submissions of the patent proprietor dated 7 February 2024 and 13 March 2024 constitute an amendment of the patent proprietor's appeal case and whether there are exceptional circumstances justifying their being taken into account.

Therefore, the opponent was already aware since their rejoinder dated 29 February 2024 that it considered the additional effort to be caused by the patent proprietor's submission dated 7 February 2024. The board is not aware of any circumstance, and none has been presented, why the opponent should not have been in a position to request apportionment of costs together with their rejoinder dated 29 February 2024.

The board therefore agrees with the patent proprietor that the request for apportionment of costs is late-filed.

Secondly, also in substance, the board is not convinced by the opponent's arguments. It is correct that under Article 16(1)(a) RPBA a late-filed amendment of a party's appeal case may be a justification for an apportionment of costs. However, such an apportionment of costs lies within the discretion of the board.

In the present case, the board notes that both parties consistently brought forward that all relevant aspects

regarding documents D19 and D4 had already been discussed in depth during the various other court proceedings pending between the parties. Under such circumstances, the board does not consider it appropriate to assume that one of the parties was confronted with any extraordinary effort in preparing their case.

Consequently, the board decided to refuse the opponent's request for apportionment of costs.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The European patent is revoked.
3. The request for apportionment of costs is refused.

The Registrar:

The Chairman:



U. Bultmann

R. Lord

Decision electronically authenticated