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Datasheet for the decision of 9 November 2021

Case Number: T 1313/17 - 3.2.06

Application Number: 09767925.2

Publication Number: 2352867

IPC: D01G21/00, D01H13/32

Language of the proceedings: EN

Title of invention:
A METHOD FOR OPTIMIZING A MANUFACTURING PROCESS IN A TEXTILE PLANT

Patent Proprietor:
Uster Technologies AG

Opponent:
Saurer Spinning Solutions GmbH & Co. KG

Headword:

Relevant legal provisions:
EPC Art. 56, 111(1), 100(a)
RPBA 2020 Art. 13(2)

Keyword:
Remittal to the department of first instance
Remittal - (no)
Inventive step - mixture of technical and non-technical features

Decisions cited:
G 0001/19, J 0006/98, T 0950/10, T 0314/15, T 0641/00, T 1143/06, T 1802/13

Catchword:

Europäisches Patentamt
European Patent Office
Office européen des brevets

Beschwerdekammern

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Case Number: T 1313/17 - 3.2.06

D E C I S I O N
of Technical Board of Appeal 3.2.06
of 9 November 2021

Appellant: (Opponent)	Saurer Spinning Solutions GmbH & Co. KG Carlstr. 60 52531 Übach-Palenberg (DE)
Representative:	Morgenthum-Neurode, Mirko Saurer Spinning Solutions GmbH & Co. KG Patentabteilung Carlstraße 60 52531 Übach-Palenberg (DE)
Respondent: (Patent Proprietor)	Uster Technologies AG Sonnenbergstrasse 10 8610 Uster (CH)
Decision under appeal:	**Decision of the Opposition Division of the European Patent Office posted on 6 April 2017 rejecting the opposition filed against European patent No. 2352867 pursuant to Article 101(2) EPC.**

Composition of the Board:

Chairman	M. Hannam
Members:	M. Dorfstätter
	W. Ungler

Summary of Facts and Submissions

I. An appeal was filed by the appellant (opponent) against the decision of the opposition division to reject the opposition against European patent No. 2 352 867.

II. The appellant requested that the decision be set aside and the patent be revoked in its entirety. It based its objections on the grounds of lack of novelty and inventive step of the subject-matter of claim 1.

III. The respondent (patent proprietor) requested that the appeal be dismissed and the patent be maintained as granted or, alternatively, according to auxiliary request 1 as submitted with the reply to the appellant's grounds of appeal.

IV. The Board issued a summons to oral proceedings and a subsequent communication in which it indicated *inter alia* that it considered the subject-matter of claim 1 of each of the main request and auxiliary request 1 to be novel but to not involve an inventive step, albeit based on different reasons to those argued by the appellant. The Board also indicated that the potential distinguishing features of claim 1 did not have a technical character and were thus not to be considered in the assessment of inventive step according to the COMVIK-approach.

V. In a letter dated 22 July 2021, the respondent requested (as a new main request) that the case be remitted to the opposition division for further prosecution. It further filed auxiliary request 2 and argued that insufficient time was available to react to

the new objection introduced by the Board for the first time in the communication.

VI. In reaction the Board rescheduled the oral proceedings to a later date.

VII. Oral proceedings in the form of a videoconference took place before the Board with the consent of both parties.

VIII. The following document is relevant for the present decision:

E1 "Strukturierungsmethoden als Basis für die Einführung von qualitätsorientierten Leitsystemen in der textilen Prozesskette", doctoral thesis of Samar Ahmed Mohsen Mohamed Mokhtar Elsayed Abd-Ellatif, faculty for mechanical engineering at RWTH Aachen University, 2004

IX. Claim 1 of the main request reads as follows (following closely the feature-by-feature analysis as submitted by the appellant in its notice of opposition and taken over on appeal, but keeping the exact formulation of the claim as granted):

A1.1 "A method for optimizing with regard to quality, productivity and/or profitability a manufacturing process (213) in a textile plant, wherein

A1.2 raw material (201) is processed in the manufacturing process (213) in several processing steps (202, 203) into intermediate products and an end product (204) is produced, and

A1.3 parameters (301, 303, 312, 393) of the raw material (201), the intermediate products and/or the end product (204) are measured in at least two different processing steps (202, 203),
characterized in that

A1.4 the measured parameters (301, 303, 312, 393) are stored in a database (300) and linked in an index file (3002),

A1.5 the data (301, 303, 312, 393, 3002) stored in the database (300) are statistically evaluated and

A1.6 and A1.7a at least one parameter (304) of the raw material (201) is predetermined and at least one parameter of the end product (204) is determined by comparison of the data (301, 303, 312, 393, 3002) stored in the database (300) with the at least one predetermined parameter (304) of the raw material (201), depending on a chosen manufacturing process (213), or

A1.6 and A1.7b at least one parameter of the end product (204) to be produced is predetermined and at least one parameter of the raw material (302) is determined by comparison of the data (301, 303, 312, 393, 3002) stored in the database (300) with the at least one predetermined parameter of the end product (204), depending on a chosen manufacturing processes [sic] (213)."

X. In auxiliary request 1 the following feature is appended to claim 1 of the main request:

A1.8 "and in a first step the parameters (301, 303) of the raw material (201), the

parameters (312) measured in the processing steps (202, 203) and the parameters (393) of the end product (204) are displayed in a display and input module (3200), so that an index page for the index file (3002) is entered in order to manually link the data associated with the said manufacturing process (213) in the index file (3002)."

XI. Claim 1 of auxiliary request 2 reads as for the main request, with two exceptions. Firstly, Feature A1.5 reads as follows:

A1.5 "the data (301, 303, 312, 393, 3002) stored in the database (300) are statistically evaluated in an evaluation module (3100) which is connected with machines in the manufacturing process (213), and"

Secondly, the following feature is appended to claim 1:

A1.9 "wherein the evaluation module (3100) changes settings in the machines directly."

XII. The appellant's arguments relevant to the present decision may be summarised as follows:

Remitting the case to the opposition division was not appropriate.

The subject-matter of claim 1 of the main request lacked novelty. All features of claim 1 of the main request were known from E1.

The subject-matter of claim 1 of the main request did not involve an inventive step. Features A1.4 (second

part), A1.5, A1.6, A1.7a and A1.7b which were considered by the Board in its communication as not being known from E1, were not technical and were to be disregarded in the assessment of inventive step as they had no effect on the physical reality.

The features added to claim 1 of auxiliary request 1 relative to claim 1 of the main request were also not of a technical nature and were to be ignored in the assessment of inventive step.

The subject-matter of claim 1 of auxiliary request 2 also did not involve inventive step. The results of the determination of the parameters were not reflected in the settings of the machines.

XIII. The respondent's arguments relevant to the present decision may be summarised as follows:

The case was to be remitted to the opposition division. The administrative instance failed to deal with the question of whether all features of claim 1 were of a technical nature. By raising this issue for the first time in the Board's communication the legal and factual framework of the proceedings changed to the respondent's detriment. The respondent had a right to have a potentially negative decision reviewed by a second instance. This was in line with long-standing case law, in which a remittal was the norm in comparable situations.

The subject-matter of claim 1 of the main request was novel. Features A1.3 to A1.7 were not known from E1.

The subject-matter of claim 1 of the main request involved an inventive step. E1 did not describe

features A1.3 to A1.7. It did not disclose that parameters of the products were measured in at least two process steps. This conferred technicality to the other distinguishing features none of which was rendered obvious by E1.

The subject-matter of claim 1 of auxiliary request 1 also involved an inventive step. The added feature provided more detail of the measurement carried out in Feature A1.3. It was however in itself technical as it defined a guided human-machine-interaction which the boards have consistently considered to be technical in the assessment of inventive step.

The subject-matter of claim 1 of auxiliary request 2 also involved an inventive step. The skilled person understood from the description of the patent that there was a connection between the evaluation of the parameters and the change in settings of the machines.

Reasons for the Decision

1. *Remittal to the opposition division*

The respondent's request that the case be remitted to the opposition division for further prosecution is rejected. In accordance with Article 111(1) EPC, the Board exercised its discretion to deal with the newly introduced aspects of inventive step in the present appeal proceedings.

1.1 The respondent argued that the issues to be treated in the framework of computer implemented inventions included new and essential questions of patentability which justified a remittal if the administrative

instance, as in the present case, did not at all deal with them.

It is undisputed that the Board was first to identify a lack of differentiating technical features in claim 1 such that, according to the COMVIK-approach and in line with case law with regard to computer implemented inventions, the subject-matter of claim 1 appeared to lack an inventive step. In the present case, however, this does not justify a remittal. The opposition division had already taken a decision in view of inventive step and had given detailed reasoning as to why it found that claim 1 of the main request met the requirements of Article 56 EPC (see the contested decision, Reasons 3.2). It argued that "[t]he doctoral thesis [remark: i.e. E1] at least neither discloses nor suggests to use stored material data for comparison with one determined parameter of either the end product or raw material" (Reasons 3.2.3). The opposition division thus saw therein a distinguishing feature to be considered in the assessment of inventive step which was not rendered obvious by E1 or the general knowledge of the skilled person. It is evident that the opposition division had no doubt that this distinguishing feature was of a technical nature.

The opposition division thus already dealt with the issue of inventive step but came, in the single aspect of technicality of the distinguishing features, to a different conclusion to the Board. It is however not the purpose of the appeal proceedings to let the opposition division repeat its examination, if the Board disagrees with a single aspect in the assessment of inventive step.

1.2 The respondent also argued that the question as to whether a particular feature had, in connection with computer implemented inventions, a technical effect was a question of fact, which was first introduced by the Board. Thereby, both the legal and factual framework of the proceedings had changed to the respondent's detriment.

The Board accepts that the matter to be discussed has indeed changed. The Board is however not legally bound to remit the case to the opposition division due to such a change. The decision to remit is still in the Board's discretion (Article 111(1) EPC). The raising of further topics to be discussed with respect to an objection which has been dealt with already in the first instance proceedings may however constitute a factor to be considered when taking further discretionary decisions. Among these is the question as to whether the parties should be given additional time to consider how to proceed, and/or as to whether further requests, submitted to overcome the newly raised objections, should be admitted into the proceedings. The Board notes that, by postponing the oral proceedings to a later date, the parties were given more than two months of additional time. Also, with the admittance of auxiliary request 2 (see reasons below), the respondent had an opportunity to react to the change in the proceedings, which reaction was then also considered by the Board.

1.3 The respondent's further argument, that if a negative decision were taken by the Board, it had no possibility of having such a decision reviewed by a second instance, is not persuasive.

Firstly, there is consistent case law of the Boards of Appeal that in the proceedings before the European Patent Office, there is no absolute right for a decision at two instances, and even less so on every single aspect (see e.g. J6/98, reasons 4; T950/10, reasons 3.1; or T314/15, reasons 6.1, last paragraph).

Secondly, as explained above under item 1.1, the opposition division based its conclusion on inventive step obviously on the understanding that the distinguishing features had technical character. It did not give a reasoning for this finding, but there was also no reason to do so, as none of the parties argued that technical character was missing.

1.4 The respondent's argument that the new issues were introduced at a very late stage in the proceedings and a remittal was in line with long-standing case law, does not change the Board's conclusions.

The question of technical character of the distinguishing features was introduced by the Board in its communication. Despite being perceived as late in the proceedings, it was in fact the first possibility for the Board to indicate its opinion on inventive step. As to the long-standing case law, the Board understands this refers to the Boards remitting a case to the first instance if a submission of new facts and evidence or a substantial amendment of the claims significantly altered the legal and factual framework and so resulted in a "fresh case" (see Case Law of the Boards of Appeal, 9th edition, 2019, V.A.7.5.1). In the present case however, the legal and factual framework was not changed by a submission of the parties. Instead, the Board had, right from the beginning of the appeal proceedings, a different opinion to the

opposition division and to the parties as regards the technical character of certain features. In providing sufficient time for the respondent to react to the Board's preliminary opinion, the Board sees remittal as being an inappropriate course of action, not least in view of, as explained above, the opposition division evidently having considered all features of claim 1 to be of a technical nature.

2. *Main request - novelty*

The subject-matter of claim 1 is novel. E1 does not disclose features A1.4 (second part "linked in an index file"), A1.5, A1.6, A1.7a and A1.7b.

2.1 The appellant argued that these features were known from E1. The reasoning why the Board found differently can however be omitted here, since the appellant's main request to revoke the patent in its entirety is allowed anyway.

2.2 The respondent also considered features A1.3 and A1.4 (first part) as being not known from E1. The Board however finds differently for the following reasons.

2.2.1 Feature A1.3 defines that parameters of the raw material, the intermediate products and/or the end product are measured in at least two different processing steps. It is undisputed that E1 (see chapter 4.2, page 40, second paragraph) describes at least the possibility of determining these parameters by measuring, as it refers to physical and chemical properties of the product that are available by measuring ("messtechnisch zugänglich") and which can be determined by using sensor systems ("durch Sensorsysteme bestimmt").

As argued by the respondent this does not mean that in E1 measurements are actually performed, let alone in two separate process steps. However, E1 is not a description of a process that is actually performed, but a doctoral thesis describing what is already known in the field of textile production and which directions are open for further research. Chapter 4, which page 40 is a part of, deals with what is already known with regard to classification of data and how it can be retrieved. It is self-evident that in a real production these possibilities are also used. Since E1 deals with exploring all the data available, it is also implicit that all the data that is accessible by measuring is to be retrieved by performing these measurements. This includes parameters of the raw material, the intermediate products and the end product in at least two different processing steps, because these parameters will be measured in all processing steps. The reason therefor is that the relevant properties of at least the raw material and the end product need to be measured in order to set up a quality management system (which is within the purpose of E1). These parameters further need to be measured to adapt the machine settings during manufacture. As also argued by the appellant in writing, this is reflected in E1, Figure 7.1 (see page 135).

The respondent's argument that E1 was silent whether it was measured at all, nor as to where and how often, is not persuasive. As set out above, in a functioning quality management system, the Board considers it necessary to measure parameters of at least the raw material and the end product.

The respondent's further argument that Figure 7.1 at page 135 of E1 did not relate to parameters of the product but of the process cannot change the Board's finding. Even if not explicitly referred to in Figure 7.1, the Board cannot imagine that no parameter of the end product is measured, even substantial deviations in quality would not be determined and machine settings would not be adapted in the following.

The Board thus concludes that a reader of E1 would consider it self-evident that measurements of parameters of the raw material, intermediate products and the end product are taken in at least two different processing steps.

2.2.2 Feature A1.4 (first part) defines that the measured parameters are stored in a database. In chapter 6.2, E1 refers to the collection and listing of data relating to the properties of the products. It explains that the data needs to be structured in order to allow for an "information processing" by "information means". The Board interprets this as a clear reference to a database which can be accessed by electronic data processing means.

The respondent's argument that these data are not the actual measured figures but merely referred to the abstract parameters, cannot change the Board's finding. It is true that E1 sets out first to structure the data in Figures 6.27 to 6.34 which were only listed in Figure 6.26. It is however also self-evident that when making use of these tables they will be filled with the actual measured figures and these will be stored in a database.

The respondent's further argument that an "information system" is no database and did not need to include one, is also not persuasive. In its broadest meaning, a database is no more than an organised collection of data stored and accessed electronically from a computer system. E1 describes exactly this. Whether this database interacts with other applications to make it more accessible, or whether the data is actually accessed, is not necessary to fulfill Feature A1.4 (first part) of claim 1.

2.3 The Board thus concludes that the subject-matter of claim 1 of the main request is novel over E1, because of features A1.4 (second part "linked in an index file"), A1.5, A1.6, A1.7a and A1.7b not being known therefrom.

3. *Main request – Inventive step*

The ground for opposition under Article 100(a) EPC prejudices maintenance of the patent as granted since the subject-matter of claim 1 does not involve an inventive step (Article 56 EPC). The distinguishing features, as compared to E1, are not of a technical nature, nor is a technical use of their results implicitly specified in the claim.

3.1 As set out under novelty above, and in a slightly simplified formulation, the subject-matter of claim 1 differs from the method described in E1 in that

- the measured parameters, which are stored in the database (A1.4, first part, known as such from E1, see the reasoning under novelty above, Reasons 2.2.2), are linked in an index file (A1.4, second part), further in that

- the data stored in the database are statistically evaluated (A1.5), and in that
- a parameter of the end product is determined by comparison of the data stored in the database with a predetermined parameter of the raw material (A1.6 and A1.7a), or in that the parameter of the raw material is determined by comparison of the data stored in the database with a predetermined parameter of the end product (A1.6 and A1.7b).

3.2 In proceedings before the EPO, it is long-standing practice to use the problem solution approach when assessing inventive step. Thereby, the technical effect of the distinguishing features, when taken together, has to be assessed.

In its communication, the Board explained why it found that the distinguishing features A1.4 (second part), A1.5, A1.6 and A1.7a and A1.7b were considered non-technical and were thus to be disregarded in the assessment of inventive step following the COMVIK-approach (see items 4.1 to 4.5 of the communication). Having received the Board's communication, this was as such not disputed by the parties.

The relevant passages of the communication are reproduced in the following:

> *"Although claim 1 defines "a method for optimizing with regard to quality, productivity and/or profitability a manufacturing process in a textile plant", it does not include a step relating to any such optimisation. By executing the method steps as defined in the claim, a parameter of the end product or of the raw material is determined. The parameter so determined might allow an algorithm*

(but just as well an experienced user) to select optimal parameters in the production process to achieve a set quality level. In other words, the determined parameter could or could not be used in a subsequent optimisation step by setting production parameters in a real manufacturing process, rendering the optimisation a potential and thus only optional step.

Furthermore, the Board sees the terminology used in features A1.4 to A1.6, relating to a database, an index file and a statistical evaluation, as implying the use of a computer.

The Board thus presently considers that claim 1 does actually not relate to a "method for optimizing [...] a manufacturing process" but defines a computer-implemented method for prediction of parameters in the end product or necessary parameters of the raw material. The assessment of inventive step is thus the same as for other computer-implemented inventions. In particular, it involves the same considerations as for computer-implemented simulations (see the decision of the Enlarged Board of Appeal G1/19, Reasons 117) with regard to the contribution of the claimed features to the technical character of the invention as well as with regard to their contribution to the solution of a technical problem (see T641/00, in the following referred to as the "COMVIK approach").

It should be noted that, despite reference being made here to G1/19 which specifically relates to the patentability of computer-implemented simulations, this Enlarged Board of Appeal decision

discusses the technical character of an invention in considerable detail, which appears of relevance to the application of the COMVIK approach in the present case. The features of the characterising portion of claim 1 (and thus all features currently considered by the Board as distinguishing features, see above under item 3.3 [remark: as of the communication]*) are not of a technical nature. Nor do they appear to contribute to the technical character of the invention in the context of the implementation of the data processing. They relate to handling and evaluating the data in order to predict certain parameters on the basis of an empirical model.*

Despite being non-technical as such, these features could still contribute to the invention's technical character (and would thus have to be considered in the assessment of inventive step) if they were to form the basis for a further technical use of the outcome (in the present case: the "determined parameter") of the claimed method (see G1/19, reasons 137).

As also stated in the same paragraph of G1/19, such further use has to be at least implicitly specified in the claim. This condition is not met if the data resulting from a claimed process has relevant uses other than the use with a technical device (G1/19, reasons 95).

In the present case, the Board presently considers that the potential use of the data stored in the database as well as the parameter determined by comparison of the data stored in the database is not limited to technical purposes. In particular,

the determined parameter is not limited to an application in a subsequent optimisation of a manufacturing process in the physical reality. It could just as well be used for educational purposes or form the basis for purely economic considerations, such as the calculation of the costs of manufacture. Any technical effect resulting from applying the determined parameter in a subsequent manufacturing process may therefore be considered as a "downstream" effect which may or may not be caused by said determined parameter (see also G1/19, reasons 96).

Whenever the determined parameter is not subsequently used in connection with a manufacturing process in the physical reality, but used for other purposes as set out above or not used at all (which is considered by the Board to be covered by claim 1), the claimed method will not achieve a technical effect."

After the Board's communication and also in the oral proceedings, these findings were not contested by the parties. The Board thus has no reason to depart from the preliminary opinion expressed in the communication and confirms it herewith.

3.3 The respondent argued that claim 1 still defined inventive subject-matter because the measurement of parameters according to feature A1.3 was technical and not known from E1. It further argued that this conferred a technical character to the method steps of the characterising portion. This is however not accepted by the Board.

As explained under novelty above (see Reasons 2.2.1), taking measurements in different process steps is not a distinguishing feature. It cannot therefore confer technicality to those process steps of claim 1 which establish a difference over what is known from E1.

3.4 The Board thus concludes that the method of claim 1 does not achieve a technical effect and hence does not solve a technical problem over the whole scope of the claim, thereby rendering the claimed method non-inventive. The ground for opposition under Article 100(a) EPC therefore prejudices maintenance of the patent as granted. The main request is thus not allowable.

4. *Auxiliary request 1 – Inventive step*

The subject-matter of claim 1 of auxiliary request 1 does not involve an inventive step (Article 56 EPC). The features added with respect to those in claim 1 of the main request are not of a technical nature, nor is a technical use of displaying the parameters or of the so entered index page implicitly specified in the claim.

4.1 As already argued with respect to claim 1 of the main request, the respondent argued afresh that the newly added features (A1.8) in the present request achieved a technical effect because of their interaction with the measurements defined in Feature 1.3. However, with Feature 1.3 being known from E1, it cannot confer technicality on the non-technical features differentiating claim 1 over E1 (see reasons 3.3 above).

4.2 The respondent further argued that "display[ing] the parameters in a display and input module, so that an index page for the index file is entered in order to manually link the data associated with the said manufacturing process in the index file" was a guided human-machine interaction process and thus was as such technical. This is also not accepted.

Displaying parameters on a display is a common form of presenting information. The Boards have repeatedly found that this normally does not contribute to the recognition of a technical solution to a technical problem. An exception would however be if the manner of presentation can be shown to have a credible technical effect (see T1143/06, Reasons 5.4, and in more detail T1802/13, Reasons 2.1.5). The question to be answered is thus whether the claimed manner of presentation credibly assists the user in performing a technical task by means of a continued and guided human-machine interaction process.

In the present case, claim 1 itself defines the very purpose of displaying the parameters in a display and input module, namely "so that an index page for the index file is entered". This is not a technical task in itself. Nor does it imply a further technical task performed with the help of the index page so entered. Displaying the parameters and entering an index page makes the data more accessible. This does however not imply that the data is accessed for a technical purpose. As for the parameters themselves, which are notably not defined in claim 1 to be used in a subsequent manufacturing process, the index file could just as well be used to retrieve data for educational purposes or for making economic decisions.

4.3 Whether displaying the parameters and entering an index page in the index file achieves a technical effect or not thus depends on whether the data is actually used in a subsequent manufacturing process. Any technical effect of such further use is only to be considered in the assessment of inventive step if such further use is at least implied by the claim (see G1/19, Reasons 124). As explained above, this is not the case in the method of claim 1. The distinguishing features of claim 1 do thus not achieve a technical effect over the whole breadth of the claim.

4.4 Therefore, the subject-matter of claim 1 does not involve an inventive step, contrary to the requirement of Article 56 EPC. Auxiliary request 1 is thus not allowable.

5. *Auxiliary request 2 – Admittance*

Exercising its discretion under Article 13(2) RPBA 2020, the Board admitted auxiliary request 2 into the proceedings, as it found that, in the present case, there were exceptional circumstances justifying this in view of the Board's preliminary opinion addressing for the first time in the proceedings the issue of technicality of various features contained in claim 1 of the main request. A detailed reasoning is however omitted since the appellant did not object to the admittance and its main request for revocation of the patent is allowed anyway.

6. *Auxiliary request 2 – Inventive step*

The subject-matter of claim 1 of auxiliary request 2 does not involve an inventive step (Article 56 EPC). As there is no link between the determined parameter of

Features A1.7a and A1.7b and the settings in the machines, changing them by the evaluation module does not render the other distinguishing features technical. Nor is it inventive as such to allow the settings to be changed by an evaluation module.

6.1 Claim 1 defines that the data is evaluated in an evaluation module, which is connected with machines in the manufacturing process, and that the evaluation module changes settings in the machines directly.

The appellant argued that, according to the claim, the results of the evaluation do not affect the settings of the machines. In other words, the claim does not state, at least not explicitly, that the evaluation module makes use of any result of the evaluation to change the settings of the machines.

The respondent did not contest that an explicit link between the evaluation and the change of settings was absent in the claim. It argued however, that a skilled person reading the description of the patent, understood that there was a connection, and made this link also for the method defined in claim 1. The Board does not accept this argument.

As pointed out by the respondent, in paragraph [0023] of the patent, two procedures are presented, called "forward engineering" and "backward engineering". By following these procedures, either the achievable quality and productivity of end products or the permissible characteristics and properties of raw materials, semi-finished goods and/or processes can be determined. In paragraph [0024] it is indicated that "[i]t is further possible that the evaluation module provides proposals for setting machines in the

production chain or changes these settings in the machine directly." Just like in claim 1 of auxiliary request 2, there is no direct link between the determination of the achievable quality and productivity of end products or the permissible characteristics and properties of raw materials, semi-finished goods and/or processes on the one hand, and the settings in the machines on the other hand. It may be evident that the evaluation module could make use of the data retrieved in the "forward engineering" or "backward engineering" to propose or directly change the settings in the machine to actually achieve the quality and productivity or the permissible characteristics and properties (albeit no way of how this could be done is derivable from the patent). This use of the data is however not implicit. The evaluation module could just as well make proposals or change settings in the machines independently of the determined parameters. This might be for example the case if the parameters are determined for educational or economic purposes, which the Board considers to be covered by the claim.

As there is no explicit link between Feature A1.9 and the other distinguishing features (A1.4, second part, A1.5, A1.6 and A1.7a and b), these do not have a technical effect in the physical reality. As already found for the main request, there is also not necessarily a technical effect or a further technical use of the results of these features, since such a use is not implied by the claim (see reasoning under item 3.2, referring to item 4.5 of the Board's communication).

6.2 The added feature that settings in the machines are changed directly by the evaluation module (and thus not

e.g. by an operator) is thus the only technical distinguishing feature over E1 and consequently the only distinguishing feature to be considered under the COMVIK-approach in the assessment of inventive step. Letting a module, and thus a part of a computer, change settings as was usually done by an operator, is however not inventive. This is also in line with the long-standing case law of the Boards of Appeal that the mere automation of functions previously performed by human operators is a general trend in technology and thus cannot be considered inventive (see Case Law of the Boards of Appeal, 9th edition, I.D.9.19.5). This was also not contested by the parties.

6.3 Therefore, the subject-matter of claim 1 does not involve an inventive step, contrary to the requirement of Article 56 EPC. Auxiliary request 2 is thus not allowable.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The patent is revoked.

The Registrar: The Chairman:

D. Grundner M. Hannam

Decision electronically authenticated