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**Datasheet for the decision
of 10 February 2025**

Case Number: T 2619/22 - 3.5.01

Application Number: 14879893.7

Publication Number: 3098679

IPC: G06Q10/06, G05B19/418

Language of the proceedings: EN

Title of invention:
PRODUCTION SYSTEM

Applicant:
FUJI Corporation

Headword:
Restricting low performers' access to system/FUJI

Relevant legal provisions:
EPC Art. 56

Keyword:
Inventive step - restricting low performers' access to system
- (no - not technical)

Decisions cited:
T 0641/00



Beschwerdekammern
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Case Number: T 2619/22 - 3.5.01

D E C I S I O N
of Technical Board of Appeal 3.5.01
of 10 February 2025

Appellant: FUJI Corporation
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Aichi (JP)

Representative: Grünecker Patent- und Rechtsanwälte
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Decision under appeal: **Decision of the Examining Division of the
European Patent Office posted on 11 July 2022
refusing European patent application No.
14879893.7 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman M. Höhn
Members: A. Wahrenberg
D. Rogers

Summary of Facts and Submissions

- I. The case concerns the appeal against the examining division's decision to refuse European patent application No. 14879893.7.
- II. The decision to refuse the application referred to the reasons given in the communication annexed to the summons of oral proceedings dated 9 March 2022. The examining division considered that the subject-matter claimed in all requests lacked an inventive step (Article 56 EPC) and that claims 1 and 3 of the first auxiliary request and claim 1 of the fifth auxiliary request contained added subject-matter (Article 123(2) EPC). Claim 1 of the fifth auxiliary request was also found to lack clarity (Article 84 EPC).

The communication referred to the following documents, amongst others:

D1: US 2010/332008 A1;
D2: US 2012/239179 A1;
D3: EP 2 458 463 A1;
D10: WO 2012/165275 A1.

- III. In the grounds of appeal, the appellant requested that the examining division's decision be set aside and that a patent be granted on the basis of the refused main request or one of the refused first to fifth auxiliary requests, or the sixth auxiliary request filed with the grounds of appeal. Oral proceedings were requested if the main request was not allowable.
- IV. The Board issued a summons to oral proceedings. In the accompanying communication, the Board tended to agree

with the examining division that the subject-matter claimed in the main request, and the second, third, and fourth auxiliary requests, lacked an inventive step. Also the newly filed sixth auxiliary request was considered to lack inventive step. The Board was minded not to admit the first and fifth auxiliary requests into the appeal proceedings since they were not sufficiently substantiated.

- V. In a letter dated 31 January 2025, the appellant withdrew its request for oral proceedings and requested "a decision according to the state of the file".
- VI. The Board cancelled the summons to oral proceedings.
- VII. Claim 1 of the main request reads:

A production system (10), provided with a production device (11), for allowing an operator to perform work related to production of the production device (11), the production system (10) comprising:

a memorizing means that memorizes history management information (84a) comprising performance information of work related to production of the production device (11) performed by an operator such that the operator is identifiable, and authority management information (84b) comprising performance restriction information for the operator;

a detecting means that detects lowered productivity of the production device (11);

an identifying means that, in a case in which lowered productivity of the production device (11) is detected, identifies the operator who caused the

lowered productivity based on the performance information and updates the performance restriction information for the operator; and

a restricting means that applies a performance restriction on the identified operator for the work related to production of the production device (11) based on the performance restriction information for the operator.

VIII. The first auxiliary request adds to claim 1, after "the production system (10) comprising:", the following feature:

"a management computer (80) that is configured to manage the production system (10) and to display a mode selection screen on a display (88), on which a work mode for the operator to perform work of work types and a production mode in which mounting device (11) is configured to perform board mounting processing are selectable (step S110)".

Additionally, at the end of the last feature, "the performance restriction information for the operator" is replaced by "the production mode the performance restriction information for the operator".

IX. The second auxiliary request adds the following at the end of claim 1 of the main request:

"characterized in that:

multiple types of works are performable as work related to production of the production device (11),

the memorizing means memorizes the performance

information such that the operator and the work type are identifiable,

the identifying means identifies the work type and the operator that caused the lowered productivity, and

the restricting means applies the performance restriction with respect to the identified work type of the identified operator."

- X. The third auxiliary request adds the following at the end of claim 1 of the main request:

"characterized in that:

the restricting means counts the number of times the identified operator has lowered productivity, and applies the performance restriction when the count has reached a predetermined quantity."

- XI. The fourth auxiliary request adds the following at the end of claim 1 of the main request:

"characterized in that:

multiple types of works are performable as work related to production of the production device (11),

the memorizing means memorizes the performance information such that the operator and the work type are identifiable,

the identifying means identifies the work type and the operator that caused the lowered productivity, and

the restricting means applies the performance

restriction with respect to the identified work type of the identified operator, and

the restricting means counts the number of times the identified operator has lowered productivity, and applies the performance restriction when the count has reached a predetermined quantity."

XII. The fifth auxiliary request adds the following features at the end of claim 1 of the main request:

"characterized in that:

multiple types of works are performable as work related to production of the production device (11), wherein the types of works are setting the arrangement order of components (P), setting reference image data or setting suction nozzles (14) of the mounting device;

wherein the memorizing means memorizes the performance information such that the operator and the work type are identifiable,

the identifying means identifies the work type and the operator that caused the lowered productivity, and

the restricting means applies the performance restriction with respect to the identified work type of the identified operator, and

the restricting means counts the number of times the identified operator has lowered productivity, and applies the performance restriction when the count has reached a predetermined quantity."

XIII. The sixth auxiliary request adds the following features at the end of claim 1 of the main request:

"wherein the production device (11) is a mounting device (11) that is configured to perform mounting processing of mounting electronic components on a board (S), the mounting device (11) being provided with a supply unit (12) that includes reels or trays housing components (P), a board processing unit (13) that performs conveying and fixing of the board (S), a mounting head (15) to which multiple suction nozzles (14) for picking up the component (P) are removably attached and that is capable of moving the suction nozzles (14) in a first (Z-axis) direction, a heading moving mechanism (16) capable of moving the mounting head (15) in a plane (XY) orthogonal to the first direction, a camera unit (17) that images the component (P) held by the suction nozzle (14), a nozzle stocker (18) that stocks multiple types of the suction nozzles (14), and a controller (19) for performing overall device control; wherein

multiple types of works that affect the productivity of the device (11) are performable as work related to production of the production device (11), wherein the types of works are setting the arrangement order of the components (P), setting reference image data that allows reliable detection of a wrong-sized component (P) and positional deviation of the component (P) by means of the camera unit (17) or setting the suction nozzles (14) of the mounting device suitable for a type of the component (P) and a type of the board (S) on which the component (P) is to be mounted; wherein

the memorizing means memorizes the performance information such that the operator and the work type

are identifiable,

the identifying means identifies the work type and the operator that caused the lowered productivity, and

the restricting means applies the performance restriction with respect to the identified work type of the identified operator, and

the restricting means counts the number of times the identified operator has lowered productivity, and applies the performance restriction when the count has reached a predetermined quantity."

Reasons for the Decision

1. *Main request*

1.1 The invention concerns a production system (10) comprising a management computer (80) allowing a human operator to control a production device (11). The production device (11) may be, for example, a mounting device for mounting electronic components (paragraph [11]). However, the type of production device is not defined in the claim. Nor is the management computer. The claim defines only some of its components, namely:

"memorizing means" for memorizing "history management information" (84a) including work performance information for an operator and "authority management information" (84b) defining performance restriction information for the operator.

There is also "detection means" for detecting a lowered

productivity of the means" for identifying the operator that caused this and updating the performance restriction information for the operator, and "restriction means" for enforcing the restriction.

In other words, the main idea of the invention is to restrict an operator from performing work in the production system if he is causing a lowered productivity. According to the application, this prevents decrease in efficiency of the system since operators who are not suitable for performing certain work are identified and have their access restricted (paragraph [0004]).

- 1.2 The examining division considered that claim 1 was a mix of technical and non-technical features and was therefore to be assessed according to the "Comvik approach" (see T 641/00 - *Two identities/COMVIK*). The decision not to let an operator perform certain work because of their low performance in a production process was not considered to be a technical decision but rather a managerial one. The technical features in claim 1 were the "memorizing means", the means for restricting the use of the production device, the production device itself, as well as means defined in terms of the non-technical function they performed ("detecting means..." and "identifying means...").

Starting from a networked computer system such as the one disclosed in D1 or D2, the claimed invention differed by the implementation of the non-technical management decision to restrict a low performing operator from performing work related to a production process of a production device. The implementation at the level of detail of claim 1 would have been straightforward and obvious for the skilled person.

Furthermore, implementing a restriction of the functions of a machine tool according to an authorisation level was known from D3.

- 1.3 The appellant argued that the performance restriction in claim 1 was not a pure management decision. The restriction was individualised in the sense that it was explicitly limited to the operator who caused the lowered productivity of the production device, while all other operators were still able to perform production work on the production device. A prerequisite for this was the storing and updating of individualised "performance information", which was not available in known production systems. Without this information, an operator causing lowered productivity of the production device could not be identified and could consequently not be stopped from performing detrimental production work on the production device.

Thus, the claimed invention had the technical effect of improving the productivity of the production device by identifying an operator who caused a lowered productivity of the production device and by automatically applying a performance restriction only onto this identified operator while leaving the performance restrictions of all other operators unchanged.

Therefore, all the features in claim 1 should be regarded as technical features and should be considered relevant for assessing inventive step.

Since none of the prior art documents D1 to D3 discloses a performance restriction as in claim 1, claim 1 involved an inventive step.

1.4 The appellant's arguments do not convince the Board. The Board rather agrees with the examining division that the claimed invention merely automates the work of a manager, i.e. observing workers on an individual basis, detecting performance issues of individual workers, and restricting the type of work that those workers are authorised to do based on the individual observations. All those things are non-technical requirements, and, therefore, in line with *COMVIK* (see the second headnote), the technical problem to be solved is how to implement the non-technical requirements on the prior art computer system.

The claim does not define any details of the implementation which go beyond the use of standard computer means for obtaining the information prescribed by the management method, processing it, and enforcing the restriction. This would have been obvious to the skilled person.

1.5 For these reasons, the Board judges that claim 1 of the main request lacks an inventive step (Article 56 EPC).

2. *First auxiliary request*

2.1 The examining division considered that the amendments in claim 1 and 3 of the first auxiliary request constituted added subject-matter (Article 123(2) EPC). In the grounds of appeal, the appellant does not provide any reasons why they consider this to be wrong and hence why the decision under appeal should be set aside for this ground. Thus, the Board considers that the appeal is not substantiated for the first auxiliary request (Rule 99(2) EPC, Article 12(3) RPBA), and for this reason, the Board does not admit the first auxiliary request into the appeal proceedings (Article

12(5) RPBA).

3. *Second auxiliary request*

3.1 Claim 1 of the second auxiliary request adds that multiple types of works are performable, the memorizing means memorizes the performance information such that the operator and the work type are identifiable, the identifying means identifies the work type and the operator that caused the lowered productivity, and the restricting means applies the performance restriction with respect to the identified work type of the identified operator.

3.2 The examining division considered that this was not technical, for the same reasons as for the main request.

3.3 The appellant argued that the restricting means differentiated not only between the operators but also between the types of work, and restricted the performance of work with respect to the identified type of work and the identified operator. In other words, the restricting means executed the work restriction based on a database with a complete matrix of combinations of possible types of work and operators. This was a technical effect that counted towards inventive step.

3.4 The Board does not find the appellant's arguments convincing but rather agrees with the examining division that differentiating between different types of work performed by operators is still within the sphere of the manager, and not a technical solution to a technical problem. Therefore, this adds merely another non-technical requirement to be implemented.

Thus, the Board judges that claim 1 of the second auxiliary request lacks an inventive step for the same reasons as the main request (Article 56 EPC).

4. *Third auxiliary request*

- 4.1 The third auxiliary request adds the following definition of the restriction means to the main request: the restricting means counts the number of times the identified operator has lowered productivity, and applies the performance restriction when the count has reached a predetermined quantity.
- 4.2 The examining division found that this did not have a technical effect.
- 4.3 The appellant argued that this feature was technical because the system did not simply provide static administrative recommendations, but avoided failure operations adjusted by a recursive flow of information interactively exchanged with the operator and feedback to the operator via the restricting means.
- 4.4 The Board does not find the appellant's arguments convincing, because a management decision can also be dynamic (the manager adapts his decision based on dynamic observations), and the implementation in claim 1 does not go beyond automating such a management method using a computer. This would have been obvious for the skilled person.
- 4.5 For these reasons, the Board holds that claim 1 of the third auxiliary request lacks an inventive step (Article 56 EPC).

5. *Fourth auxiliary request*

5.1 Claim 1 of the fourth auxiliary request is a combination of claim 1 of the second and third auxiliary requests. Therefore, the reasons given for those requests apply also to the fourth auxiliary request.

6. *Fifth auxiliary request*

6.1 Claim 1 of the fifth auxiliary request defines the multiple types of work as setting the arrangement order of components and setting reference image data or setting suction nozzles of the mounting device.

6.2 The examining division considered that this contravened Article 123(2) EPC and, moreover, that the amendment introduced a lack of clarity in the claim (Article 84 EPC).

6.3 In the grounds of appeal, the appellant addresses neither of those objections for the fifth auxiliary request. Therefore, the Board does not admit the fifth auxiliary request into the appeal procedure for lack of substantiation (Article 12(3) and (5) RPBA).

7. *Sixth auxiliary request*

7.1 The sixth auxiliary request was filed with the grounds of appeal and is therefore an amendment in the sense of Article 12(4) RPBA. It is based on the sixth auxiliary request in the decision under appeal with the inclusion of the word "the" in several places in claim 1 to address the examining division's clarity objection in point 25.2 of the decision.

The Board admits the sixth auxiliary request into the

appeal proceedings since it addresses an objection in the decision under appeal and does not introduce any new matter to be discussed. The claim remains the same in substance.

Claim 1 of the sixth auxiliary request specifies that: the production device is a mounting device that is configured

"to perform mounting processing of mounting electronic components on a board, the mounting device being provided with a supply unit that includes reels or trays housing components, a board processing unit that performs conveying and fixing of the board, a mounting head to which multiple suction nozzles for picking up the component are removably attached and that is capable of moving the suction nozzles in a first direction, a heading moving mechanism capable of moving the mounting head in a plane orthogonal to the first direction, a camera unit that images the component held by the suction nozzle, a nozzle stocker that stocks multiple types of the suction nozzles, and a controller for performing overall device control; wherein multiple types of works that affect the productivity of the device are performable as work related to production of the production device, wherein the types of works are setting the arrangement order of the components, setting reference image data that allows reliable detection of a wrong-sized component and positional deviation of the component by means of the camera unit or setting the suction nozzles of the mounting device suitable for a type of the component and a type of the board on which the component is to be mounted."

7.2 The examining division considered that claim 1 of the sixth auxiliary request lacked an inventive step

(Article 56 EPC), essentially for the same reasons as the main request. The division found that the nature of the production device and the work types performed on this device did not affect the managerial decision of restricting an operator to perform certain work. Furthermore, the mounting device and work types in claim 1 were disclosed in document D10.

7.3 The appellant argued that the claimed system did more than just offer static administrative management; it imposed restrictions based on both the task at hand and the operator, with adjustments made through a continued flow of information between the operator and the device. Independent claim 1 specified various types of work and the assignment of performance restrictions according to the specific work type and operator. As a result, the system created a direct technical link between the machine's operation, its assessment of performance, and the subsequent restrictions on permissions by the system. Therefore, the invention had technical character through its human-machine interaction.

7.4 The Board is satisfied that the added features gives a context to the productivity restriction. They define the production device and the types of work. However, the appellant does not argue that this subject-matter is novel. Indeed, it is clear from the application that the contribution of the invention lies in the setting of a restriction based on productivity information obtained from the system. The Board does not see a direct link between the technical work performed on the production device, the detection of lower performance, and the resulting restriction. Indeed, the claim does not define how lower performance is detected in relation to the production device and the types of

work. Therefore, the Board shares the examining division's view that the type of production device and production work does not influence the managerial decision of restricting work by an operator based on performance. For these reasons, the Board considers that claim 1 of the sixth auxiliary request lacks an inventive step (Article 56 EPC) for the reasons as already given.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:



T. Buschek

M. Höhn

Decision electronically authenticated