

BESCHWERDEKAMMERN
DES EUROPÄISCHEN
PATENTAMTS

BOARDS OF APPEAL OF
THE EUROPEAN PATENT
OFFICE

CHAMBRES DE RECOURS
DE L'OFFICE EUROPEEN
DES BREVETS

Internal distribution code:

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

D E C I S I O N
of 20 September 2004

Case Number: W 0017/03 - 3.5.1

Application Number: PCT/US02/17637

Publication Number: WO 02/099730

IPC: G06K 7/00

Language of the proceedings: EN

Title of invention:

Radio frequency identification in document management

Applicant:

3M Innovative Properties Company

Opponent:

-

Headword:

Radio frequency identification/3M

Relevant legal provisions:

PCT Art. 16, 17(3)(a)

PCT R. 13.1, 13.2, 40.1, 40.2(c), 40.2(e)

Keyword:

"Invitation to pay additional fees sufficiently reasoned
(yes)"

"Investigation of technical relationships with the aid of
common problems underlying the inventions"

Decisions cited:

G 0001/89, W 0004/85, W 0011/89, W 0003/93, W 0004/94,
W 0006/97

Catchword:

1. The evaluation of unity involves comparing problems solved (or effects achieved) by different claims, whereas the evaluation of inventive step is carried out on a single claim. As a result, when examining unity, the problems solved by different claims must be considered in the light of each other and cannot be determined in isolation in an absolute sense.
2. In the evaluation of inventive step, the idea is to define a problem based on the distinguishing features that is essentially as narrow as possible, but not involving elements of the solution. On the other hand, in the evaluation of unity, these restrictions do not apply, since the overall object is to find out what the claims have in common, i.e. if the respective inventions are so linked as to form a single general inventive concept.
3. Hence, the specific problems solved by the different inventions with respect to the closest prior art may need gradual refinement, in particular generalisation starting from the problems directly solved, to find out whether or not there is a common denominator that still distinguishes the inventions from said prior art (see reasons 3.3 to 3.5).



Europäisches
Patentamt

Beschwerdekammern

European
Patent Office

Boards of Appeal

Office européen
des brevets

Chambres de recours

Case Number: W 0017/03 - 3.5.1

International Application No. PCT/US02/17637

D E C I S I O N
of the Technical Board of Appeal 3.5.1
of 20 September 2004

Applicant: 3M Innovative Properties Company
3M Center, P.O. Box 33427
Saint Paul
MN 55133-3427 (US)

Representative: -

Decision under appeal: Protest according to Rule 40.2(c) of the Patent Cooperation Treaty made by the applicants against the invitation (payment of additional fees) of the European Patent Office (International Searching Authority) dated 18 September 2002.

Composition of the Board:

Chairman: S. Steinbrener
Members: W. Chandler
B. Schachenmann

Summary of Facts and Submissions

- I. International patent application No. PCT/US02/17 637 was filed with 65 claims, including 35 independent claims, relating to the structure and use of radio frequency identification (RFID) tags to assist in file and document management.
- II. The European Patent Office (EPO), acting in its capacity as an International Searching Authority (ISA) under Articles 16 PCT and 154 EPC, informed the applicant that the application did not comply with the requirement of unity of invention (Rule 13.1 PCT) and invited the applicant to pay fees for 17 additional inventions, i.e. a sum of 16,065 Euros, in accordance with Article 17(3)(a) and Rule 40.1 PCT.

In the invitation the ISA stated that EP-A-1 033 675 (D1) disclosed the general problem tackled by the present application, namely avoiding interference between overlapping antenna coils of RFID tags in stacked devices. D1 solved this problem by offsetting the coils relative to the centre of each device.

The invitation then essentially listed the different "special technical features" in each of the 18 groups of claims said to lack unity, and the different problems considered to be solved by those features.

The groups of claims were held to relate to the following inventions:

1. Claims 1, 2: A method for minimizing interactions by using information from a database to indicate the locations of the tag.
2. Claims 3, 4: A method for minimizing interactions between overlapping RFID tags comprising using a guide indicating more than one position.
3. Claims 5–8: A method for minimizing interactions between RFID tags associated with adjacent items comprising a step of providing a surface.
4. Claim 9: A file folder including a spacer and comprising an RFID tag.
5. Claims 10–12: A method of minimizing the effect of RFID tag–tag interactions comprising the step of using detuned tags.
6. Claims 13–25: A method of interrogating RFID tags by polling.
7. Claims 26–30: A system for tracking items comprising a timer.
8. Claim 31: A system for managing RFID-tagged items comprising a notification system.
9. Claims 32–35: A method of using an RFID interrogation system, in which the system is associated with a location near a certain person.

10. Claim 36: An RFID system comprising RFID writers adapted to write identical information to each RFID tag in range.
 11. Claims 37–42: A container system comprising an RFID tag associated with a barcode.
 12. Claims 43, 44: An RFID based tracking system comprising a main storage location and at least one other area.
 13. Claim 45: A method of using a portable RFID reader enabling a user to locate an RFID-tagged item.
 14. Claims 46–47: A method of using a portable RFID reader comprising a user interface to indicate whether the item is being checked into or out of inventory.
 15. Claims 48–55: A method of transferring a group of files.
 16. Claims 56–60, 63: A method of providing notification that an RFID tag has been interrogated.
 17. Claims 61, 62: A multitasking software.
 18. Claims 64, 65: A legal or medical facility comprising a main storage room and a plurality of RFID readers.
- III. The applicant paid the additional fees under protest (Rule 40.2(c) PCT). Although the ISA's analysis of D1 was not contested, the applicant argued that the

additional fees for groups 2, 3, 4, 9, 13, 14, 17 and 18 should be refunded because the claims in the following groups did not lack unity of invention:

Applicant group 1: Claims 1-9 (ISA groups 1-4), having the common technical feature of minimising interactions between RFID tags.

Applicant group 2: Claims 31 and 32-35 (ISA groups 8 and 9), having the common technical features of "a storage area or location for RFID-tagged items, an RFID reader or interrogator, and notifying of or location near a person expected to work on that item."

Applicant group 3: Claims 13-25 and 45 (ISA groups 6 and 13), having the common technical feature of polling items bearing RFID tags.

Applicant group 4: Claims 26-30 and 46-47 (ISA groups 7 and 14), having the common technical feature of an inventory check-out system.

Applicant group 5: Claims 56-60, 63 and 61-62 (ISA groups 16 and 17), having the common technical features of an RFID asset tracking program and instructions for notifying or notification that an RFID-tagged item has been interrogated.

Applicant group 6: Claims 43-44 and 64-65 (ISA groups 12 and 18), having the common technical features of a medical or legal facility containing RFID-tagged files.

- IV. The protest was reviewed in accordance with Rule 40.2(e) PCT by a review panel of the ISA. It held that the invitation to pay the additional search fees was justified and invited the applicant to pay a protest fee for further examination of the protest in accordance with Rule 40.2(c) PCT.

The reasons given in the notification of the review panel included additional observations which may be summarized as follows for each of the groups identified by the applicant:

Applicant group 1: The technical relationship given by the applicant for these claims was known from D1.

Applicant group 2: The applicant had not shown that the two distinct features of "notifying" and "location of a person" were linked by a single general inventive concept.

Applicant group 3: The common feature of "polling items bearing RFID tags" was disclosed in D1 and was common general knowledge.

Applicant group 4: The common feature of an "inventory check-out system" was common general knowledge.

Applicant group 5: The applicant had not shown that the two distinct features of an "RFID tracking program" and "notifying ... that an RFID-tagged item has been interrogated" were linked by a single general inventive concept.

Applicant group 6: The applicant had not convincingly argued that the two distinct features of "an RFID tracking program" and a "medical or legal facility" were linked by a single general inventive concept.

The applicant duly paid the protest fee.

Reasons for the Decision

1. *Admissibility of the protest*

- 1.1 Rule 40.2(c) PCT provides that: "Any applicant may pay the additional fee under protest, that is, accompanied by a reasoned statement to the effect that the international application complies with the requirement of unity of invention or that the amount of the required additional fee is excessive."

In the present case, the applicant has provided reasons why the claims of certain groups listed in the invitation had unity with claims of other groups, and stated generally that the amount of the additional fees was excessive.

- 1.2 The protest therefore complies with the requirements of Rule 40.2(c) and (e) PCT as far as the certain groups are concerned and is therefore admissible.

2. *General approach to the examination of unity*

- 2.1 Rule 13.1 PCT states that the requirement for unity of invention is that the international application shall relate to one invention only or to a group of

- inventions so linked as to form a "single general inventive concept."
- 2.2 Rule 13.2 PCT stipulates that the requirement of unity of invention is fulfilled only when there is a "technical relationship" among the claimed inventions involving one or more of the same or corresponding "special technical features." The term "special technical features" is defined as "those technical features that define a contribution which each of the claimed inventions, considered as a whole, makes over the prior art."
- 2.3 The PCT International Search Guidelines as in force from 18 September 1998 state at point VII-5 that the basic criterion for unity of invention is the presence of a single general inventive concept. However they do not give much further guidance on the approach to examining unity, but refer to the examples in Annex B, Part 2 of the Administrative Instructions under the PCT. From these rather simplistic examples, it appears that assessing unity merely involves identifying any special technical features that are common to the inventions in question.
- 2.4 Nevertheless, it is established case law of the boards of appeal acting under Articles 154(3) and 155(3) EPC, respectively, that if this does not yield a single general inventive concept, then the effects achieved and the problems solved by the special technical features should be examined to determine the full contribution of a claim over the prior art so as not to miss any correspondence amongst apparently dissimilar features (see Case Law of the Boards of Appeal of the

EPO, 4th edition 2001, page 184, point 6). The object of the exercise is to see if a common problem exists that implies a technical relationship that the special technical features solve in the same or a corresponding way with respect to the identified prior art.

3. *The ISA's Approach to the examination of unity*

- 3.1 As far as the present case is concerned, the Board first notes that the PCT International Search Guidelines state at point VII-9 that lack of unity of invention may be directly evident "*a priori*," that is, before considering the claims in relation to any prior art, or may only become apparent "*a posteriori*," that is, after taking the prior art into consideration. The Guidelines also state that the reasoning should reflect the provisional opinion regarding the relevance of the prior art. In its invitation to pay additional fees, whilst not contesting the novelty of the claimed subject-matter, the ISA argued that prior art document D1 disclosed the general problem tackled by the present application and various features of the claims. It is thus apparent that the ISA's objection to unity was *a posteriori*.
- 3.2 The invitation then essentially listed the "special technical features" with respect to D1 of the claims in each of the groups and the problems considered to be solved by those features. These problems were formulated quite narrowly on the special technical features, and there was apparently no systematic attempt to derive these problems from the description. In fact, there was no discussion of why there was no single general inventive concept among the groups of

claims. It is therefore apparent that the ISA considered that the absence of common technical features and an allegedly different problem solved was sufficient to demonstrate lack of unity between groups of inventions.

- 3.3 The ISA's approach to the determination of the problem appears to stem from the belief that what is required is the same analysis as that used to determine the problem when using the problem and solution approach to evaluate inventive step, possibly because differences and problems are involved in both situations. However, the present Board is not convinced that the investigation of technical relationships for unity with the aid of common problems underlying the inventions is necessarily the same for the following reasons. Firstly, the evaluation of unity involves comparing problems solved (or effects achieved) by different claims, whereas the evaluation of inventive step is carried out on a single claim. As a result, when examining unity, the problems solved by different claims must be considered in the light of each other and cannot be determined in isolation in an absolute sense. Secondly, in the evaluation of inventive step, the idea is to define a problem based on the distinguishing features that is essentially as narrow as possible, but not involving elements of the solution. On the other hand, in the evaluation of unity, these restrictions do not apply since the overall object is to find out what the claims have in common, i.e. if the inventions are so linked as to form the "single general inventive concept" of Rule 13.1 PCT. This concept could in principle lie at any level of generality, and it is

immaterial whether it resides in the problem, features of the solution, or a mixture of both.

- 3.4 In order to find any commonality, the problems solved by the special technical features must be formulated with some care. If they are too narrow, when they could have been more general, they may have nothing in common leading to the possibly wrong conclusion that there is a lack of unity. If they are too general, when they could have been narrower, the common aspects may be known, also leading to the possibly wrong conclusion that there is a lack of unity. Hence, in the Board's view, the specific problems solved by the different inventions with respect to the closest prior art may need gradual refinement, in particular generalisation starting from the problems directly solved, to find out whether or not there is a common denominator that still distinguishes the inventions from this prior art. Since applicants often present their inventions in a very general way, it may be that the application itself is a good reference point for the problems solved by the different inventions. This would be in accord with the approach advocated in W 6/97 (not published in OJ EPO), which states that establishing the technical problem underlying a claimed invention or group of inventions in relation to the state of the art should start, as a rule, from what is considered in the description as having been achieved.
- 3.5 Since all of the technical problems to be derived by the Board in the present case are disclosed in the description, the Board leaves open the wider question of whether and to what extent the single general

inventive concept has to be disclosed or derivable from the application as filed.

4. *Substantiation of the invitation*

- 4.1 Rule 40.1 PCT requires that the invitation to pay additional fees must specify the reasons why the application is not considered to comply with the requirement of unity of invention.
- 4.2 Decision W 4/85 (OJ EPO 1987, 63, point 3) explained that the purpose of this provision was to enable the applicant and appeal body to examine whether the invitation was justified. This required that the basic considerations behind the finding must be set out in a logical sequence. A mere list of the subject-matter of the claims was only adequate in straightforward cases.

This was further defined in W 11/89 (OJ EPO 1993, 225, point 4.1) as requiring, except in straightforward cases, a reasoning why there was no technical connection or interaction between the separate inventions. This in turn required addressing the problems underlying the inventions. Decision W 4/94 (OJ EPO 1996, 73, point 4.1) maintained a pragmatic approach when it stated that the obligation to provide justification in the invitation was not infringed if the prime reason for the decision was identifiable, even though the reasons could be seen as insufficient or incorrect.

- 4.3 In the present case, although as mentioned in paragraph 3.2 above, the ISA's invitation contained essentially only a list of the special technical features of and

problems solved by the claims, with no explicit discussion of why there was no single general inventive concept, the Board hesitates in deeming this to be inadequate. Such a conclusion would otherwise be tantamount to prescribing a preferred approach for a complete analysis of all the problems solved by each of the claims in the different inventions. If the justification were not to meet this standard, the invitation would not be regarded as legally effective and the additional fees would be refunded, essentially without considering the applicant's case, or lack of it, at all.

- 4.4 The present Board prefers to maintain the essentially pragmatic approach of W 4/94, cited above, for the following reasons.

Firstly, the very existence of Rule 40.1 PCT implies that the presence of adequate reasoning in the invitation has to be distinguished from the judgement of its merit vis à vis the protest under Rule 40.2(c) PCT. Any considerations relating to the merit imposed on the requirements for the reasoning under Rule 40.1 PCT would undermine this legal distinction.

Secondly, specific requirements for reasoning are not described in the PCT Guidelines or the Administrative Instructions. By analogy with European procedure, the requirement for a particular form of reasoning could lead to a situation where a decision was not adequately reasoned under Rule 68(2) EPC for the sole reason that a particular form of the problem and solution approach, not mentioned in the Guidelines for examination, had not been used in the analysis of inventive step.

Finally, the rather simplistic example invitations given in Annex B of the PCT International Search Guidelines would not appear to impose any specific standard of reasoning. Since these Guidelines are binding on the EPO (see Article 2(1) of the Agreement between the EPO and the WIPO, OJ EPO 2001, 601), the present Board judges that the level of reasoning in the example invitations should be considered as adequate in the interest of harmonisation of PCT procedure, at least.

- 4.5 Consequently, the Board judges that the ISA's invitation does comply with the requirements of Rule 40.1 PCT because the special technical features of the claims and the associated problems solved were identified. The implied lack of common features and common problems thus raises *prima facie* a reasoned case for lack of unity, which the applicant can understand and answer in the protest.

5. *Examination of the current protest*

The applicant requests refund of the additional fees paid, and gives reasons for this, for groups 2, 3, 4, 9, 13, 14, 17 and 18 defined in the ISA's invitation. In view of this and of W 3/93 (OJ EPO 1994, 931), which states at point 4 that the Board cannot investigate ex officio whether an objection of lack of unity would have been justified for reasons other than those given in the invitation, the Board has to judge whether the retention of the search fees for these groups only was justified. The Board will therefore consider each of the ISA's groups in turn within each of the groups that the applicant considers has unity. The following

headings also contain paraphrased versions of ISA's designations of the groups.

5.1 Applicant group 1

ISA Group 1 - Claims 1, 2: information from a database

5.1.1 Since the unity of these claims has not been called into question, the Board will consider claim 2 to be representative of this group, as did the ISA. The Board essentially agrees with the ISA in that claim 2 has the special technical features of providing information in a database that is indicative of the location of the RFID tag on the item, and using this information to select successive items for a storage area. The Board judges that the ISA's problem of minimising the overlapping of consecutive tags located at different positions could constitute a first stab at assessing the problem underlying the invention. However, as mentioned above, this problem must be considered along with the features themselves and may need to be refined in the light of the features and problems of the other groups.

ISA Group 2 - Claims 3, 4: using a guide to position tags

5.1.2 Concerning group 2, the Board agrees with the ISA that the special technical feature of the claims in this group is a guide to indicate more than one position at which an RFID tag may be located. This is different from either of the special technical features of claims 1 and 2, and so it must be examined whether any technical relationship between the groups can arise

when the contributions of the claims are "considered as a whole", i.e. when the problems underlying the inventions are taken into consideration.

- 5.1.3 The ISA considered that the claims of group 2 solved the (different) problem of facilitating freedom of tag placement. The appellant stated in the protest that the technical relationship among the claims of groups 1 and 2 (and 3 and 4) was that they shared in common the technical feature of minimising interactions between RFID tags.
- 5.1.4 However, in line with the reasons given above, the Board cannot agree with either of these arguments. The applicant's single concept is so generally formulated that it is in substance known from D1, which aims to reduce the probability of such interactions. The ISA's problem is so narrow that it cannot be linked to other groups. It is true that the ISA's problem of facilitating freedom of tag placement is different from the problem underlying the claims of group 1, namely minimising the overlapping of consecutive tags located at different positions. Thus, having no features in common either, there is, on the face of it, no unity between groups 2 and 1. However, it is in precisely this situation where the claims have no features in common that the problem underlying the inventions must be examined carefully and may need to be refined in the light of the other inventions to avoid missing general concepts. As mentioned above, the choice of problem is unfettered by the requirements of being as specific as possible and not involving elements of the solution imposed by the manipulations of the problem and solution approach.

5.1.5 In this case, without wishing to enter an iterative process involving the other inventions, the Board jumps straight to what in its view is the common problem or single concept, namely *systematically* offsetting the locations of the tags to avoid interference between them. This problem, is more general than the ISA's problem, and it involves the corresponding special features of keeping track of the positions of the tags (group 1) and indicating them (group 2). This common problem is derivable from the application at page 11, last paragraph to page 12, last paragraph, which also describes the subject-matter of each of claims 1 and 2 in combination with the use of a guide.

5.1.6 Furthermore, this single concept is *prima facie* inventive since D1 only discloses offsetting the tags from the centre of items so that there is "little possibility" that they will be located in the same position (see column 8, lines 31 to 43) when they are perfectly stacked. This is essentially an *accidental* avoidance of overlapping.

5.1.7 The Board therefore judges that groups 1 and 2 have unity, so that the protest for group 2 is justified.

ISA Group 3 - Claims 5–8: providing a surface

5.1.8 The Board agrees with the ISA that the special technical feature of claims 5 and 7 is to provide a surface on which the items rest, the surface having a structure that positions each item differently.

- 5.1.9 The ISA considered that the claims of group 3 solved the problem of reading the tags on items that bear tags at identical positions. The appellant again stated that this group shared the technical feature of minimising interactions between RFID tags.
- 5.1.10 The Board cannot agree with the appellant's statement for the same reason given in connection with group 2. This time, the ISA's problem, although more specific, is also known from D1, paragraph [007].
- 5.1.11 However, the Board judges that the feature of providing a surface on which the items rest, the surface having a structure that positions each item differently solves the same problem common to groups 1 and 2, namely systematically offsetting the locations of the tags to avoid interference.
- 5.1.12 The Board therefore judges that group 3 has unity with groups 1 and 2, so that the protest for group 3 is justified.

ISA Group 4 - Claim 9: A file folder including a spacer

- 5.1.13 The Board agrees with the ISA that the special technical feature of claim 9 is a file folder with an RFID tag, the folder having a spacer to maintain a predetermined minimum thickness in the area of the tag.
- 5.1.14 The ISA considered that the claims of group 4 solved the problem of de-coupling the antenna coils of different tags. The appellant again stated that this group shared the technical feature of minimising interactions between RFID tags.

5.1.15 As in the case of groups 2 and 3, the Board cannot agree with either of these statements; the appellant's for the reason given in connection with group 2, the ISA's this time because the problem is also too general and misses a more specific common problem. In fact, the Board judges that the spacer has the same effect as the structure of the type defined in group 3, solving the same problem of systematically offsetting the locations of the tags to avoid interference.

5.1.16 The Board therefore judges that group 4 has unity with groups 1, 2 and 3, so that the protest for group 4 is justified.

5.2 Applicant Group 2

ISA Group 8 - Claim 31: managing items with notification system

5.2.1 The special technical features of claim 31 are a storage area with an RFID reader and notifying a user that an RFID-tagged file is in the area and awaiting the user's action. The Board judges that at first sight, it does appear that these features solve a problem along the lines of the ISA's problem of indicating an optimal order of work.

ISA Group 9 - Claims 32–35: interrogation system near a person

5.2.2 The special technical features of claim 32 in this group are using an RFID interrogation system associated with a certain shelf or storage area location near a

certain person who is expected to work with the files located there.

- 5.2.3 The ISA formulated the (different) problem as giving a certain person easier access to items. The applicant argued that the groups shared the common technical feature of "a storage area or location for RFID-tagged items, an RFID reader or interrogator, and notifying of or location near a person expected to work on that item."
- 5.2.4 The Board tends to agree with the review panel that the applicant has not demonstrated that the two distinct features of "notifying" and "location of a person" were linked by a single general inventive concept. Even taking the possible problems solved by the features into consideration, namely indicating an optimal order of work and giving a certain person easier access to items, it is difficult to see what the single concept could be. Moreover, the description states in connection with the relevant embodiments, at page 24, lines 18 to 21, that a certain file located on a certain shelf or other storage location, on which a certain person is expected to work (group 9), is *different* from a storage room containing a large group of files perhaps awaiting work by anyone with a group or organisation (group 8), implying a lack of unity. The Board therefore has no reason to overturn the ISA's finding for groups 8 and 9.
- 5.2.5 The Board therefore judges that group 8 lacks unity with group 9, so that the protest for group 9 is not justified.

5.3 Applicant Group 3

ISA Group 6 - Claims 13–25: polling tags

- 5.3.1 The independent claims in group 6 recite polling of RFID tags on items in a storage area using various different polling schedules: some areas more frequently than others (claim 13), with preempting (claim 17), user alterable (claims 18 and 19), driven by activity in the storage area (claims 20, 22 and 23), and depending on removal or replacement of items (claim 24).
- 5.3.2 The ISA appears to have based its analysis on the features of only claim 13, and arrived at the problem of optimal distribution of the resources available for polling. Nevertheless, the Board judges that this could be considered to be the problem solved by any of the claims in this group.

ISA Group 13 - Claim 45: using a portable reader to locate tagged items

- 5.3.3 The Board essentially agrees with the ISA in that the special features of claim 45 are a portable RFID reader using information from a polling system in a storage area.
- 5.3.4 The ISA formulated the (different) problem as retrieving lost items. The applicant argued that groups 6 and 13 share common technical feature of polling RFID-tagged items. The review panel considered that this common feature was disclosed in D1 and was common general knowledge.

- 5.3.5 Because the ISA dealt only with the problems solved (in the sense of the problem and solution approach) and not the overall contribution of the claims, they did not identify the common feature of polling RFID-tagged items in a storage area. Moreover, contrary to the review panel's view, the Board cannot find any reference to polling tagged-items in a storage area in D1, or the summary of the prior art in the present application. Furthermore, it appears to the Board that the concept of polling described in the present application is a form of continuous reading and writing involving a schedule. This is different from simply reading and writing to a tag that might be said to be implicit from D1. Thus the Board judges that it is at least debatable whether the common concept is not inventive.
- 5.3.6 In G 1/89 (OJ EPO 1991, 155) the Enlarged Board held at point 8.2 that the charging of additional fees under Article 17(3)(a) PCT should be made only in "clear cases", in particular, where *a posteriori* objections were concerned. The criterion of "only in clear cases" is used in many subsequent decisions, often in a different context in the present Board's judgement. It is apparent from G 1/89 that what has to be clear is that the common general concept is not new or not inventive before raising a lack of unity objection, especially *a posteriori*, not that the case is "not clear" in some other aspect. In other words, that the common concept is *prima facie* not novel or not inventive. The Board judges that polling tagged-items in a storage area is not one of the "clear cases" of unity *a posteriori* envisaged in G 1/89, and the protest for group 13 is justified.

5.4 Applicant Group 4

ISA Group 7 - Claims 26–30: tracking items using a timer

- 5.4.1 The Board essentially agrees with the ISA in that one of the special features of independent claim 26 of group 7 is a check-out station for interrogating RFID-tagged items. The ISA also identified the additional feature of the timer for tracking the amount of time the item has been checked-out. However the incorporation of this feature led the ISA to the very specific problem of "reducing staff time associated with reminding people to return overdue files." This is too narrow to have any hope of finding a common concept with other claims in the application.

ISA Group 14 - Claims 46–47: using a portable reader to check inventory

- 5.4.2 The Board essentially agrees with the ISA in that the claims of this group include the special technical feature of interrogating RFID-tagged items to indicate whether they are being checked into or out of the inventory. The ISA also identified the additional feature that the RFID reader was portable.
- 5.4.3 In the light of both features, the ISA formulated the (different) problem as changing the status of an item outside the main storage area. The applicant argued that groups 7 and 14 share the common technical feature of an inventory check-out system. As in the case of

groups 6 and 13, the review panel considered that this common feature was common general knowledge.

5.4.4 Because the ISA again dealt only with narrow problems solved (in the sense of the problem and solution approach) and not the overall contribution of the groups, they did not identify the common feature of interrogating an item with a tag to determine whether it has been checked-out. Furthermore, again the Board cannot find any disclosure or hint of this in D1, or the summary of the prior art in the present application. The Board therefore again judges that this is not one of the "clear cases" of unity *a posteriori* envisaged in G 1/89 (*supra*), and the protest for group 14 is justified.

5.5 Applicant Group 5

ISA Group 16 - Claims 56–60, 63: notifying that a tag has been interrogated

5.5.1 It is not quite clear from the invitation whether the ISA considered independent claim 63 to be in group 16 or group 17. The list of groups has it in group 16, whereas the reasoning deals with it in connection with claim 61, which is in group 17. However, this does not affect the decision on unity.

5.5.2 The Board agrees essentially with the ISA in that the special technical features of claim 56 are providing a signal and, in response, providing a visual indication on a personal computer screen that an RFID-tagged item has been interrogated. The Board also essentially

agrees that the problem runs along the lines of notification of RFID-tag related activities.

ISA Group 17 - Claims 61, 62: A multitasking software

- 5.5.3 The Board agrees with the ISA in that the special technical features of at least claim 61 of this group are a computer running a foreground application and simultaneously running a background RFID tag asset tracking application.
- 5.5.4 The ISA formulated the (different) problem as making a computer available for other tasks. The applicant argued that the groups share the common technical feature of an RFID asset tracking program notifying that an RFID-tagged item has been interrogated.
- 5.5.5 The Board cannot agree with the applicant's argument because the claims of group 17 do not contain the feature of notification. The Board judges that the only possible relationship between groups 16 and 17 is that of running an RFID-tag asset tracking program on a computer, and then only if the interrogation and notification functions of claim 56 can be considered as "asset tracking". However, the relevant part of the description, at page 31, lines 4 to 10, describes the notification function as an alternative to the asset tracking. Since the Board tends to agree with the review panel that the applicant has not demonstrated that the two distinct features of "asset tracking" and "notifying" were linked by a single general inventive concept, the Board has no reason to overturn the ISA's finding for groups 16 and 17.

5.5.6 The Board therefore judges that group 16 lacks unity with group 17, so that the protest for group 17 is not justified.

5.6 Applicant Group 6

ISA Group 12 - Claims 43, 44: tracking system comprising a main storage location and at least one other area

5.6.1 The Board agrees essentially with the ISA in that the special technical features of the claims in this group are a patient/legal file main storage location that includes an RFID tag reader connected to a computer having access to a database for checking files into and out of the storage location and updating the database and at least one other area with reader connected to the computer. These features could be considered as solving the ISA's problem of tracking the files.

ISA Group 18 - Claims 64, 65: A legal or medical facility with tag readers

5.6.2 The Board essentially agrees with the ISA in that the special technical features of claim 64 in this group are a medical/legal facility comprising a main file room where RFID-tagged files are stored when not in use and a plurality of RFID tag readers on shelves adjacent to work locations connected to a computer to enable a user to determine information about files read by the tag readers.

- 5.6.3 The ISA formulated the (different) problem as accessing information about files at different locations outside the main storage area. The applicant considered that groups 12 and 18 shared the common technical feature of "a system or facility for either medical or legal including files with RFID tags." The review panel considered the RFID tracking system of group 12 and the medical or legal facility of group 18 to be two distinct concepts.
- 5.6.4 Firstly, the Board considers that the ISA's problem is slightly too specific. The Board judges a better problem to be that of improving tracking of files, as essentially stated in the part of the application concerning this embodiment at page 27, line 31. More importantly, concentration on only the narrow problems solved again led the ISA to overlook the common features of a main storage area for storing RFID-tagged files, another area with an RFID tag reader connected to a computer, all solving the problem of improving tracking of files. Since there is no evidence whatsoever that this concept is known or obvious, the Board judges again that this is not a "clear cut" case of unity *a posteriori* envisaged in G 1/89 (*supra*), so that the protest for group is justified.
6. The Board accordingly concludes that the protest was justified in the sense of Rule 40.2(e) PCT for groups 2, 3, 4, 13, 14 and 18. Since the protest was not entirely justified, the protest fee cannot be refunded (Rule 40.2(e) PCT).

7. In view of W 3/93 (supra), the objection of lack of unity could be raised again on different grounds in the event of subsequent proceedings under PCT Chapter II.

Order

For these reasons it is decided that:

1. The protest is partially justified.
2. The refund of 6 additional search fees is ordered.

The Registrar:

The Chairman:

M. Kiehl

S. Steinbrener