

Internal distribution code:

- (A) Publication in OJ
(B) To Chairmen and Members
(C) To Chairmen

D E C I S I O N
of 14 February 2001

Case Number: T 0162/99 - 3.2.4

Application Number: 92907923.4

Publication Number: 0577695

IPC: B65G 47/50

Language of the proceedings: EN

Title of invention:

Apparatus and methods for baggage reconciliation and location

Patentee:

Softlab GmbH

Opponent:

INTERNATIONAL AIR TRANSPORT ASSOCIATION

Headword:

-

Relevant legal provisions:

EPC Art. 56

Keyword:

"Inventive step - yes"

Decisions cited:

-

Catchword:

-



Case Number: T 0162/99 - 3.2.4

D E C I S I O N
of the Technical Board of Appeal 3.2.4
of 14 February 2001

Appellant: Softlab GmbH
(Proprietor of the patent) Zamdorfer Strasse 120
D-81677 München (DE)

Representative: Loth, Hans-Friedrich
Wessing & Berenberg-Gossler
Rechtsanwälte
Isartorplatz 8
D-80331 München (DE)

Respondent: INTERNATIONAL AIR TRANSPORT ASSOCIATION
(Opponent) IATA Building, 2000 Peel Street
Montreal, Quebec, H3A 2R4 (CA)

Representative: Schaumburg, Thoenes, Thurn
Patentanwälte
Postfach 86 07 48
D-81634 München (DE)

Decision under appeal: Decision of the Opposition Division of the
European Patent Office posted 8 December 1998
revoking European patent No. 0 577 695 pursuant
to Article 102(1) EPC.

Composition of the Board:

Chairman: C. A. J. Andries
Members: M. G. Hatherly
M. K. S. Aúz Castro
T. Kriner
H. Preglau

Summary of Facts and Submissions

- I. The opposition division's decision to revoke European patent No. 0 577 695 was posted on 8 December 1998.

The appellant (patentee) filed an appeal and paid the appeal fee on 5 February 1999. A statement of grounds was filed on 8 April 1999.

- II. Oral proceedings took place on 14 February 2001 in the presence of the appellant and the respondent (opponent 02). Opponent 01 had withdrawn its opposition by letter of 26 May 1999.

During the oral proceedings the appellant filed a new, sole request comprising the following independent claims 1 and 9:

"1. Apparatus for checking air travellers' baggage comprising:

check-in means (16) for entering and storing for each traveller identification data for the traveller, for at least one item of baggage in the traveller's charge and to travel to the same destination as the traveller (but not under the traveller's control) and for an aircraft on which the traveller and the said item are to travel,

loading-check means (17, 18, 19, 24) for entering for each item of baggage identification data of the item and of an aircraft on which it is intended to load that item, the loading-check means being positioned, in operation, at a location where baggage is loaded for travel in aircraft,

collation means (10) for automatically collating data received from the check-in means and the loading-check means, the collation means being coupled for communication with the check-in means and the loading-check means, and

loading-control means (21), coupled to the collation means, for carrying out a load-restraint procedure at the said location of the loading-check means if the automatic collation determines, from the identification data of an item of baggage intended to be loaded, that the item should not be loaded at least until authorisation is obtained,

the collation means is arranged to automatically check for duplicate identification data of items of baggage to give an indication when any said duplicate data occurs,

the loading-control means is arranged to carry out the said load-restraint procedure if the means for checking indicates for an item of baggage that its identification data duplicates that of another item of baggage which is to travel on the same aircraft,

the collation means comprises

means (10) for associating, in a predetermined way, the identification data of each item of baggage with the identification data of the traveller in charge of that item and the identification data of the aircraft on which the traveller and the said item are to travel, and

means (10) for checking for each item of baggage whose identification data is entered at the loading-check means that the aircraft on which it is intended to load that item is associated in the said predetermined way with that item,

the loading-control means being arranged to carry out the said load-restraint procedure if the said means for checking does not indicate for an item of baggage that the item is associated in the said predetermined way with the aircraft on which it is intended to load that item,

the collation means is arranged to determine whether each item of identification data for baggage items entered at the loading-check means corresponds to an item of identification data for a baggage item already entered at the check-in means, and to cause the loading-control means to carry out the said load-restraint procedure if no such correspondence exists, and further

boarding-check means for entering the identification data of each traveller who passes into a location where travellers have entered an aircraft or must, unless released, do so, and in that

the collation means is coupled for communication with the boarding-check means, and

the collation means is arranged to determine whether each item of identification data for baggage items entered at the loading-check means corresponds to an item of identification data for a baggage item already entered at the boarding-check means, and to cause the

loading-control means to give an audible or visual alarm if no such correspondence exists, in carrying out the said load-restraint procedure."

"9. A method for checking air travellers' baggage, comprising

a check-in procedure for entering and storing for each traveller identification data for the traveller, for at least one item of baggage in the traveller's charge and to travel to the same destination as the traveller (but not under the traveller's control), and for an aircraft on which the traveller and the said item are to travel,

a loading-check procedure at a location where baggage is loaded for travel in aircraft and in which identification data of baggage is entered,

automatically collating data from the check-in procedure and the loading-check procedure, and

carrying out a load-restraint procedure at the said location if the automatic collation determines, from the identification data of an item of baggage intended to be loaded, that the item should not be loaded at least until authorisation is obtained,

checking for duplicate identification data of items of baggage and giving an indication when any said duplicate occurs,

carrying out the said load-restraint procedure if the said checking gives an indication for an item of baggage that its identification data duplicates that of another item of baggage which is to travel on the same

aircraft,

automatically collating data including associating, in a predetermined way, the identification data of each item of baggage with the identification data of the traveller in charge of that item and the identification data of an aircraft on which the traveller and the said item are to travel, and

checking for each item of baggage whose identification data is entered in the loading check procedure that the aircraft on which it is intended to load that item is associated in the said predetermined way with that item,

and a boarding-check procedure for entering the identification data of each traveller who passes into a location where the travellers have entered an aircraft or must, unless released, do so, including

associating the identification data of each item of baggage with the identification data of the traveller in charge of that item, and

signalling whether each item of baggage is associated with a traveller who has passed into the said location."

III. The following documents were referred to in the appeal proceedings:

D1: US-A-4 711 994

D3: US-A-4 058 217

D7: Passenger Services Conference Resolutions Manual,
10th Edition, Effective 1 April 1990,
International Air Transport Association;
Resolutions 739 and 740 (pages 159 to 177) and
Recommended Practice 1739 (pages 545 to 549)

IV. During the appeal proceedings the appellant argued that the subject-matter of the independent apparatus and method claims 1 and 9 respectively was inventive over the prior art.

The respondent countered the appellant's arguments, maintaining that the claimed subject-matter was obvious from the teachings of D1 and D3.

V. The appellant requested that the decision under appeal be set aside and that the patent be maintained on the basis of claims 1 to 13 and an adapted description, all filed in oral proceedings, and of Figures 1 to 3 of the patent as granted.

The respondent requested that the appeal be dismissed.

Reasons for the Decision

1. The appeal is admissible.

2. *Amendments*

2.1 The present independent claim 1 is the combination of the granted claims 1 to 5.

The present independent claim 9 is the combination of

the granted claims 13, 14 and 17 plus the granted apparatus claim 3 reformulated as a method step.

Thus there is no objection under Article 123(2) EPC to the present independent claims and, since their scope is narrower than that as granted, there is no objection under Article 123(3) EPC either.

2.2 The dependent claims 2 to 8 and 10 to 13 all have corresponding granted versions and have merely been renumbered and their appendancies renumbered.

2.3 The present description is the granted description brought into line with the present claims.

The drawings are as granted.

2.4 Thus the present version of the patent does not contravene Article 123 EPC.

3. *Novelty*

After examination of the prior art documents on file, the board is satisfied that none of them discloses an apparatus with all the features of claim 1 or a method with all the steps of claim 9. Moreover the respondent accepts the novelty of the subject-matter of these claims.

The subject-matter of claims 1 and 9 is thus novel within the meaning of Article 54 EPC.

4. *Closest prior art, problem and solution - claim 1*

4.1 The board and the parties agree that the prior art

closest to the invention is D1 which is entitled "Security system for correlating passengers and their baggage".

- 4.2 When the passenger checks in using this prior art system his ticket and the claim check for his baggage are scanned and entered into the airline computer system (see column 4, lines 5 to 12). Obviously the data entered identify the aircraft on which the passenger and his baggage are to travel. The passenger goes separately from his baggage to the aircraft (see column 4, lines 37 and 38). Indeed Figure 1 shows, after box 30, different treatment for the baggage and passenger.

The baggage is scanned prior to placement in the aircraft (see box 38 and column 4, lines 49 to 52). Thus a loading-check means is known from D1. When boarding, the passengers surrender their tickets which are again scanned (see box 32 and column 4, lines 43 to 46) whereafter a list is made of the baggage which is allowed to be placed on the aircraft (see box 36 which is the result of the comparison of boxes 30 and 34). The data received from the check-in (and boarding) means and the data from the baggage loading-check means is matched (see the lines from boxes 36 and 40 respectively to box 42 and column 4, lines 53 to 55) i.e. collated.

Column 5, lines 16 to 24 state that "if any claim check code number information is present in the system, without corresponding ticket and/or boarding pass/seating code number information, the system will quickly indicate that the information is missing. The code numbered claim check list will then be used to

identify the offending baggage 42, which will then be removed if loaded 44, or separated if not loaded, to await possible identification by a later entered code for a passenger that may have been on standby status."

Thus there is a loading control and a load-restraint procedure is carried out if the system determines, from the identification data of an item of baggage intended to be loaded, that the item should not be loaded at least until authorisation is obtained.

- 4.3 There has been much discussion before the opposition division and before the board about whether various features of claim 1 are known from D1, e.g. the location of the loading-check means, whether various means are coupled with other means, and whether features are provided by the system or are carried out manually by the operators.
- 4.4 However it is unnecessary for the board to decide whether these features are known or obvious from D1 because the discussion before the board concerning claim 1 centres on the check of whether there are two items of baggage with duplicate identification numbers.
- 4.5 To state that the problem starting from D1 is to avoid items of baggage with duplicate identification numbers would be to point towards the solution and so this cannot be the objective problem starting from D1. The board sees the objective problem that arises from the prior art system of D1 as being to make a safer, more reliable system.
- 4.6 The board considers that the present invention solves this problem, in particular by the features of the

present claim 1 that are most concerned with the duplication aspect, namely:

- "the collation means is arranged to automatically check for duplicate identification data of items of baggage to give an indication when any said duplicate data occurs",
- "the loading-control means is arranged to carry out the said load-restraint procedure if the means for checking indicates for an item of baggage that its identification data duplicates that of another item of baggage which is to travel on the same aircraft", and
- "the collation means is arranged to determine whether each item of identification data for baggage items entered at the loading-check means corresponds to an item of identification data for a baggage item already entered at the boarding-check means, and to cause the loading-control means to give an audible or visual alarm if no such correspondence exists, in carrying out the said load-restraint procedure."

5. *Inventive step - claim 1*

5.1 According to column 2, lines 41 to 47 of D1 "present airlines procedures utilize a system where ... each claim check 24 is identified by a unique number" and it is proposed that "baggage claim checks 24 be imprinted with unique code numbers that are machine readable", see also the references in claims 1 and 9 to uniquely distinctive code numbers for both the passenger (ticket) and the baggage claim check.

5.2 Thus D1 apparently excludes the possibility of two items of baggage having duplicate identification numbers by providing unique baggage identification numbers. The board cannot see any hint in D1 that the skilled person would realise that, even after having provided unique baggage identification numbers, duplicate numbers could still occur e.g. by fraud. The board thus does not consider that it would be obvious for the skilled person starting from D1 to check for duplicate baggage identification numbers.

5.3 The question that next arises is whether, although D1 does not mention checking for duplicate baggage identification numbers, the system of D1 nevertheless would detect them if they were to occur.

5.4 In D1 a check is made that, for each baggage identification number, there is "corresponding ticket and/or boarding pass/seating code number information" (see column 5, lines 16 to 20). Thus it is indirectly checked whether for the baggage number (e.g. B1) there is a corresponding passenger number (e.g. the boarding pass for passenger P1). If the number P1 is in the system then the baggage item with number B1 is loaded.

The board considers that if another baggage item with the number B1 arrives to be checked then also this baggage item is loaded if the passenger number P1 is in the system. In view of the length of the numbers used and the great number of such numbers used even on a single flight, it would be most unlikely that a baggage handler would notice that a number has already occurred.

In view of the final two lines of claim 1 of D1, namely

"the second list indicating which of the baggage is or is not allowed to be loaded" the board does not see the final part of claim 7 of D1 which includes "generating a second list of identified baggage associated with a specific boarded passenger ... and indicating on the second list which of the baggage is or is not allowed to be loaded" as meaning that this is an action by the operator. In any case these corresponding passages in claims 1 and 7 cannot be interpreted differently from one another. They both express, in the framework of the patent seen as a whole, the same technical information, albeit once in a form appropriate to an apparatus claim and once in a form appropriate to a method claim. These lines only express what happens in box 42 of Fig. 1, namely a check whether a specific code number of baggage, listed in box 40, corresponds to a code number of baggage belonging to a passenger present on the list in box 34. If there is a correspondence then the baggage is allowed onto the aircraft, otherwise the baggage is removed (box 44). This procedure has nothing to do with the claimed teaching of the opposed patent which is to avoid transporting items of baggage with duplicate identification numbers.

The respondent cited column 4, lines 49 to 55 and column 5, lines 13 to 20 of D1 to argue that it would be obvious to check for duplicate numbers and that the latter passage indicates a one to one correspondence. The board however sees nothing in these passages to suggest that anything more is done than to check that each baggage item number corresponds to a boarded passenger number i.e. nothing to ensure a one to one correspondence and nothing to suggest the detection of duplicate baggage item numbers.

Moreover the board sees nothing in the whole of D1 to suggest either that a check is made either manually or automatically whether the baggage number B1 has already occurred on other baggage, or that a check is made that passenger P1 is not associated with two baggage items B1, or that the passenger number P1 is taken off the check list once one item of baggage B1 for him is loaded.

5.5 The question that next arises is whether the skilled person, after having provided unique baggage identification numbers in the system of D1, would be led by something else in the prior art to check whether duplicate numbers have in fact occurred e.g. by fraud, in order to make the system of D1 safer and more reliable.

5.6 The respondent argued that D3 would lead the skilled person to do this.

5.7 D3 sets out two particular embodiments of which the first concerns a system for handling airline baggage, see Figure 1, lines 11 and 12 of column 4, and column 4, line 15 to column 8, line 45. As explained in column 4, lines 15 to 29, bags are issued with numbers of which there are sufficient so that "Since no bag is likely to be in continuous transit for greater than 14 days, no two bags can ever carry the same serial number simultaneously. Thus every bag is uniquely identifiable." While column 4, lines 33 to 35 add that "no problems are caused unless traffic has been so badly under-estimated that the 14-day cycle reduces to almost zero", there is no disclosure for this particular embodiment (i.e. in column 4, line 15 to column 8, line 45) of checking whether two bags in fact are carrying the same serial number simultaneously.

5.8 The second particular embodiment in D3 concerns the sorting of postal parcels, see Fig. 2, lines 13 and 14 of column 4, and column 8, line 46 to column 11, line 35. Each post office issues its originating parcels with parcel tags numbered from 0 to 65535, this number series being continually reissued (see column 9, lines 33 to 35). The post office places the parcels in parcel bags, each parcel in a particular bag will have a different parcel tag number.

Lines 35 to 60 of column 9 of D3 explain that when parcels from different parcel bags are sorted at another post office for putting into a new parcel bag, it may happen that two parcels have the same parcel tag number. Column 9, lines 48 to 60 add that "The essential point is that the above chance coincidence or of tags having the same serial number in the same parcel bag will be known at the time it is produced,

and a record of its occurrence will be maintained on the magnetic data card accompanying the further parcel bag in the normal way. Thus at the next sorting of the parcels in this further parcel bag, by having the sorting process controller first read through the complete accompanying magnetic data card, the existence if any of parcels bearing tags of coincident serial numbers can be noted, and such ambiguously coded parcels passed to an operator for manual sorting."

- 5.9 Claim 1 of D3 is directed to "Apparatus for sorting articles such as airline baggage" and claim 3 which is dependent on claim 1 mentions "a label carrying a serial number which is known to be duplicated within the group of articles being sorted". Moreover the independent method claim 5 of D3 specifies "computer means being programmed to recognize repeated serial numbers among said data" while claim 7 which is dependent on claim 5 states that the articles are airline baggage.

Thus in D3 while the second particular embodiment with its duplicate numbers is described in column 8, line 46 to column 11, line 35 only in connection with the sorting of postal parcels, its teaching is plainly applicable also to airline baggage. Thus one might equate the parcel bag containing many parcels with the aircraft containing many items of baggage.

- 5.10 However D3 and the present invention deal with duplicate numbers in rather different ways.

In D3 one knows that the duplicate numbers can exist because of the way that numbers are allocated to the parcels, and one deals with these numbers as soon as

they occur by a record on the magnetic data card accompanying the further parcel bag. Both parcels with the same number are transported and sorted manually **after** the transportation i.e. at the subsequent post office (not at the originating post offices).

If, at the originating post office, a second parcel with the same number was introduced by fraud into the parcel bag then the system would not detect it at the originating post office and prior to transportation because there is no check made. Moreover this type of duplication would not be discovered at any subsequent post office because its presence would not be noted on the accompanying data card. Only if the duplicates came together with a third same number parcel from another parcel bag would the system look for duplicates and then find all three but, once again, **after** transportation.

In the present invention a check is made at the originating airport for duplicate numbered baggage **before** transportation and if such is found it is not loaded and therefore not transported.

Thus, even if one were to apply the second system in D3 (described specifically for parcels) to the first system (described specifically for airline baggage), one would not arrive at the present invention.

- 5.11 The teaching of D3 even if applied to the teaching of D1 would not yield the present invention because neither in D1 nor in D3 is a check made for duplicates before transportation with resultant loading prevention of any found.

5.12 The problem of the no-show passenger is discussed in D7 (see Resolution 739 in the left hand column of page 159) and indeed systems checking that baggage did not travel without its owner were well known before the priority date of the present patent. However the board cannot see any disclosure before the priority date of the present patent of checking for an item of baggage with a number identical (e.g. by forgery) to that of a legitimate item of baggage. This would require a one to one or reverse correspondence check and the board sees no evidence of this in the prior art.

5.13 Accordingly the board cannot see that any combination of prior art teachings could (let alone would) lead the skilled person in an obvious manner to the subject-matter of claim 1.

6. *Claim 9*

6.1 The independent method claim 9 includes the steps of

- "checking for duplicate identification data of items of baggage and giving an indication when any said duplicate occurs," and
- "carrying out the said load-restraint procedure if the said checking gives an indication for an item of baggage that its identification data duplicates that of another item of baggage which is to travel on the same aircraft".

6.2 Thus, as with claim 1, the discussion before the board concerning claim 9 centres on the check of whether there are two items of baggage with duplicate identification numbers. The comments made on claim 1 in

the above sections 4 and 5 regarding the closest prior art, problem, solution and inventive step apply analogously to claim 9.

6.3 The board accordingly finds that the subject-matter of claim 9 is not obvious from the available prior art.

7. Thus, as required by Articles 52(1) and 56 EPC, the subject-matter of each of the independent claims 1 and 9 involves an inventive step.

8. The respondent stated in paragraph 4 on page 4 of the letter of 12 August 1999 that all the submissions made before the opposition division were maintained, including the submissions by the (former) opponent I.

Plainly not all the arguments made earlier can still be relevant to the present amended claims. It was the task of the respondent to set out those objections that he felt still remained valid and he was given the opportunity at the appeal oral proceedings to do this. There is nothing in the remaining arguments to change the board's finding that the subject-matter of the independent claims is inventive and it is not necessary to comment on these remaining arguments brought with a blanket reference.

9. The patent may therefore be maintained amended, based on independent claims 1 and 9, claims 2 to 8 and 10 to 13 dependent thereon, the amended description and the granted drawings.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the first instance with the order to maintain the patent in amended form on the basis of claims 1 to 13 and an adapted description (pages 2 to 13), all filed in oral proceedings of 14 February 2001 and of Figures 1 to 3 of the patent as granted.

The Registrar:

The Chairman:

G. Magouliotis

C. Andries