COMMISSIONER'S DECISION

OBVIOUSNESS: Cash Box for Use in Public Transit Systems

A cash box that automatically locks when removed from the fare box is shown in the prior art and claims directed to this feature are refused. A claim adding a vault to the combination is refused for extension of monopoly because of another patent already issued on a divisional. Five claims not previously refused were remanded for further examination.

Final Action: Modified.

This decision deals with a request for review by the Commissioner of Patents of the Examiner's Final Action dated March 25, 1975, on application 108,271 (Class 232-5). The application was filed on March 19, 1971, in the name of George G. Dominick et al, and is entitled "Exact Fare System." The Patent Appeal Board conducted a Hearing on July 21, 1976, at which Messrs. T.R. Kelly and G.L. Conway represented the applicant.

This application relates to a fare box for use in public transportation systems where coins or tickets are deposited. This fare box has a cash box receptacle area which is adapted to receive a removable cash box. The applicant's cash box is designed to prevent pilfering as it is automatically locked upon removal from the fare box. Figure 2 of the drawings given below shows the fare box and figure 18 the construction of the cash box.

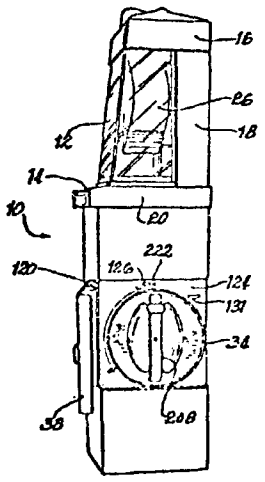


Figure 2

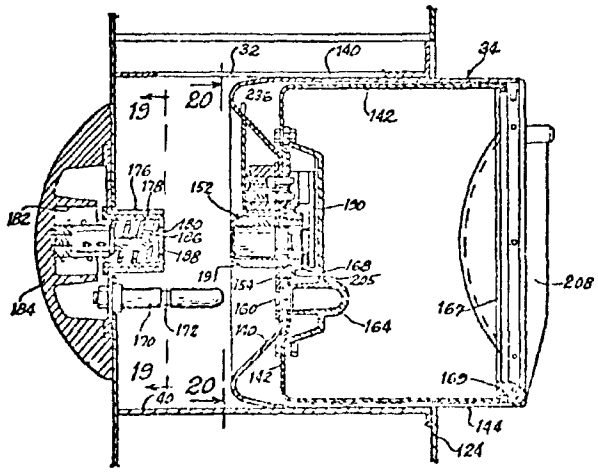
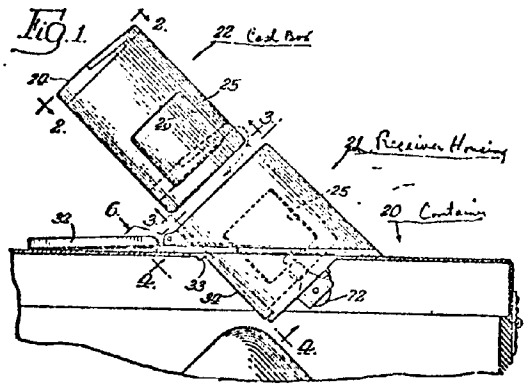


Figure 18

In the Final Action the examiner rejected claim 16 as being improperly dependent on claim 15, and refused claims 1 and 15 for lacking subject matter in view of the following references.

United States		
2,815,166	Dec. 3, 1957	Sollenberger
2,884,188	April 28, 1959	Grant et al

The Sollenberger patent relates to a coin collection apparatus for a coin operated mechanism, such as a parking meter or vending machine. Figure 1 of Sollenberger illustrates his invention.

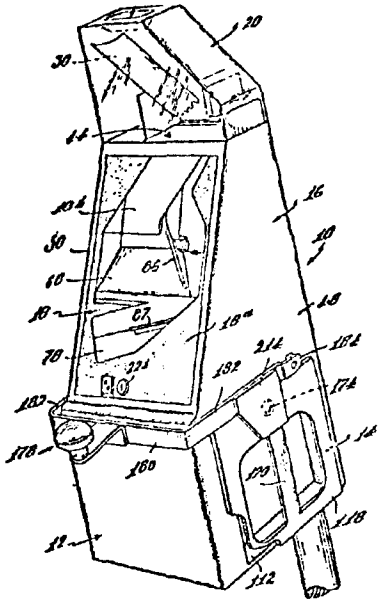


Claim 1 of Sollenberger reads:

> Coin handling apparatus comprising a closed coin container; a receiver housing on the container having a generally cylindrical receiving recess therein and having a coin discharge opening within the container; an actuating pin fixed in the recess and extending generally axially thereof; a generally cylindrical sleeve mounted in the recess, said sleeve having a coin discharge opening therein and being rotatable from a first position in which said discharge openings are aligned to a second position in which said discharge openings are misaligned; a closed cash box having a coin discharge opening therein; a gate in the cash box and rotatable relative thereto to control the discharge opening therein, said cash box having an arcuate slot in its bottom to receive said actuating pin; a lock in the cash box locking the gate against opening movement relative to the coin discharge opening in the cash box; a key fixed in the bottom of the recess, said key being positioned to enter the lock and the pin being positioned to enter the slot and engage the gate when the cash box is inserted into the sleeve; and means providing a driving connection between the box and the sleeve when the box is so

> inserted into the sleeve, whereby rotation of the inserted box within the recess will unlock the gate and rotate the box relative thereto to open the coin discharge opening in the box, said rotation serving to rotate the sleeve to said first position to permit coins in the box to pass into the container.

The Grant patent relates to a fare collection box which comprises a normally locked receptacle in which the fares collect and from which the coins and tickets may be removed only by an authorized person. This patent is illustrated in figure 1 shown below.



In the Final Action the examiner stated (in part):

> Regarding claims 1 and 15 it is noted that applicant's only substantial argument against the previous rejection is that the Sollenberger cash box and coin collecting container combination constitutes a different environment than does a similar cash box in his fare box which has certain claimed features such as the fare deposit section, the inspection surface for temporary holding of fares, and the manual dumping means, which incidentally are all shown by Grant et al.
>
> While it is agreed that the actual combination shown by Sollenberger is not a fare box with a rotatable cash box it should be borne in mind that the Sollenberger cash box is primarily used as a coin receiving box in a coin-operated mechanism such as a parking meter or vending machine. Further, the fact that applicant knew of this reference, as evidenced by page 12, lines 27 to 29, and that both the Sollenberger and Grant et al patents issued in the same class show that both patents are at least in the same art field.

Regarding applicant's comment that "If the combination of Grant and Sollenberger were obvious then the combination would have been made long before applicant's efforts", the following observations are made. The need to reduce the possibility of pilfering from a bus fare collection box such as the one shown by Grant et al, and further to arrange that the bus driver did not carry any money, has only become acute in recent years and it cannot be said that there has been a long felt need which was unsatisfied. The Grant et al fare box was designed so that the accumulated coins and tickets could be removed only by an authorized person and as applicant states "transit authorities have reverted to, the "exact fare" collections". If it was thought necessary to eliminate the possibility of pilfering from a removed and closed Grant et al cash box by an unauthorized person who had obtained the necessary two keys by making a removed and closed cash box openable only by rotational insertion into a coin collecting container then Sollenberger shows how this could be done. It follows that when applicant decided to use a cash box having a basic structure following the Sollenberger concept, then the fare box would have to have a receptacle similar to the receptacle on the Sollenberger collecting container.

In view of the foregoing it is held that it would not require the exercise of inventive ingenuity on the part of a person skilled in this art to replace the cash box of the Grant et al fare collection box with the Sollenberger cash box, to make a structure as claimed in claims 1 and 15.

Claims 1 and 15 are consequently rejected as being obvious over Grant et al in view of Sollenberger.

Claim 16 stands rejected as being improperly dependent on claim 15.

The applicant in his response dated September 25, 1975 and September 29, 1975 to the Final Action stated (in part):

The Sollenberger patent relates to a coin handling apparatus particularly suitable for use in a system for collecting coins from a coin-operated mechanism such as a parking meter or vending machine. In the system, the collector is provided with a sealed container 20 which may be mounted on wheels or may be carried, with the container being provided with a receiver housing 21 in its top, being generally cylindrical in shape and proportioned to receive a cash box 22 therein. The cash box 22 is normally installed within a parking meter housing so that coins deposited in the parking meter usually find their way into the cash box by means of a coin slot 23 in the top thereof. The cash box 22 is provided with a coin discharge opening 25 in its side normally closed by a gate 26 so that when the cash box is removed from the parking meter housing, the coins therein are unavailable to the collector. The cash box and

receiver housing are so designed as to permit the gate 26 to be opened only when the cash box is inserted fully within the coin receiver housing and the coin discharge opening 25 covered thereby, so that only when so inserted can the coins be removed from the cash box. When the cash box is so inserted and the gate operated to open the coin discharge opening, the cash box cannot be withdrawn from the receiver housing until the parts are again operated as to cause the gate 26 to close the coin discharge opening.

Prior Art - The Combination of Grant and Sollenberger:

Bringing together the teachings of Sollenberger and Grant in combination would result in a fare box having a housing or the like for carrying the Sollenberger cash box and some sort of channelling device between the inspection surface and the cash box such as to funnel the fares through the narrow slit inlet 23 of Sollenberger. The Sollenberger container 20 with its cash box receptacle 21 would be used to collect money from the cash box. It is important to note that Sollenberger is specifically concerned with the container 20 and its receptacle 21 which are used to collect money from the cash box. Sollenberger is specifically not concerned with the arrangement for feeding money and the like into the cash box.

Applicant's Invention

This "obvious" combination of Sollenberger with Grant is not what applicant has done. Applicant is concerned with a cash box that will,indeed, function in a system such as that of Sollenberger but which can readily be used for collecting bus fares and the like. One of the major problems involved in collecting bus fares is that the fares are in the form of both cash and tickets. The Sollenberger cash box could not be used for this purpose since the paper tickets could not be reliably fed through the thin coin slot 23. Any attempt to do so would inevitably result in jamming of the system with a bent or frayed ticket.

To solve this problem applicant has provided a system including a fare collection box with a particular structure and a cash box that cooperates with this fare collection box so as to be able not only to collect coins and tickets but also to exclude the possibility of pilferage.

The Question of Obviousness:

1. Difference in Field:

Taken alone, in the Sollenberger device the cash box is removed from the vending machine or parking meter and placed in a cash box receptacle on the top of a vault-type unit and there operated to discharge to the vault. The vault is transported from parking meter to parking meter (or vending machine) at spaced intervals of time and, therefore it lies in the field of the vault system of the applicant (Canadian application 198,671 allowed September 16, 1975) rather than the present fare collection system which is actually carried on the bus.

...

3. Not Mere Combination:

Referring again to the combination of prior art, even if it might have been obvious to try to modify existing fare collection systems by using Sollenberger's cash box as the fare collection box on each bus and using the receptacle 21 and container 20 of Sollenberger for the collection of money from a plurality of buses, this is not what the applicant has done. The applicant has used a cash box receptacle as well as a cash box for each bus. This is not obvious and, indeed, if it had occurred to anyone other than the applicant, it would have probably been dismissed as being wasteful of receptacles. In Sollenberger there is only one receptacle to a plurality of cash boxes whereas in the applicant's system there is one receptacle for each cash box.

4. Different Cash Boxes:

Further, the Sollenberger cash box itself varies considerably from that of the applicant. The Sollenberger box has both an inlet and an outlet for coins, the applicant's cash box has one aperture that serves as both an inlet and an outlet. Therefore, for the Sollenberger system to work in the same way as the applicant's system, the inlet 23 of Sollenberger would have to be dispensed with and some means would have to be found of opening the gate 26 when the cash box is in the parking meter or vending machine, of directing the coins through the opening 25, and subsequently closing the gate when the box is removed for the periodic collection of the fares therefrom.

In other words, the applicant's arrangement or something similar thereto would have been necessary but Sollenberger would surely have thought that wasteful and inefficient and anything but obvious. Indeed, he would probably have thought it to be obviously undesirable because of the expense of a plurality of cash box receptacles. Referring to the actual wording of claim 1, there is no closure means in Sollenberger for blocking the access opening (slot 23) and no means to permit rotation so that the access opening will receive fares or coins.

5. Long Felt Need:

Although it is not necessary to establish a long felt need as an element for invention, this ancillary issue has arisen. In the Final Official Action, it is stated that the need to reduce the possibility of pilfering from a bus fare collection box such as the one shown by Grant and to arrange that the bus driver not carry any money, has only become acute in recent years and, therefore, it cannot be said that there had been a long felt need which remained unsatisfied. The applicant argues that the need that a driver not carry any money has indeed become acute in recent times because of thefts by bandits. However, the present invention bears no more relationship to this problem than to the older fare collection systems. The solution lies

> only with an exact fare being deposited in any of the systems available and thus the driver need carry no money with him which could be stolen. However, there has always been a need to stop pilferage from these systems by drivers and persons employed to empty the cash boxes from each bus. The need to stop pilferage, although never critical (and now not critical) has always been present and remains unsatisfied. Therefore the applicant's comment that "If the combination of Grant and Sollenberger were obvious then the combination would have been made long before the applicant's efforts" is valid.

The question to be considered is whether the rejected claims have made a patentable advance in the art. Rejected claim 1 reads as follows:

> In a construction for collecting fares and the like comprising a fare deposit section, an inspection surface defined in said deposit section for temporarily holding fares deposited, manually operable means for dumping fares from said inspection surface into a cash box area, a cash box receptacle defined in said cash box area, and a removable cash box adapted to be received in said receptacle, said cash box defining an access opening, closure means in said cash box for blocking said access opening for preventing access to the interior of the cash box, means normally locking said closure means against movement relative to said access opening, means defined by said receptacle operating to unlock said closure means upon insertion of said cash box into said receptacle and to thereby permit rotation of said cash box relative to the receptacle to locate the cash box in position such that the access opening will receive fares dumped from said inspection surface, means for locking said cash box in place in the receptacle upon rotation away from its inserted position and toward said receiving position, and wherein said closure means is automatically closed during rotation of the cash box back to said inserted position and prior to removal of the cash box from the receptacle.

Prior to the hearing the agent, Mr. Kelly, was contacted and informed that claim 2 was intended to be included with rejected claims 1 and 15. He agreed to cover claim 2 in his representations to the Board.

The applicant states that he "is concerned with a cash box that will, indeed, function in a system such as that of Sollenberger but which can readily be used for collecting bus fares and the like". He rationalizes that by using a single opening for both entry and exit, he prevents pilfering, and tickets as well as coins can be used.

In both Sollenberger and the applicant's cash box, the opening is automatically locked when the box is moved from one location to another. The applicant argues that the coin slot of Sollenberger is subject to pilfering since it

is not sealed. When we look at slot 23 of Sollenberger, we find overlapping ribs within the slot which makes it virtually impossible to "fish" or "shake" the coins out of the cash box during transit. Consequently we conclude that in Sollenberger pilfering is not a factor we need consider.

Another advantage suggested by the applicant for his box is that his arrangement accepts both coins and tokens, whereas Sollenberger accepts only coins. Sollenberger discloses the concept of a cash box which is locked during transit, and which is only opened when placed in an appropriate unlocking arrangement located in a collection vault. By using a similar unlocking arrangement in both the fare box and in the collection vault, the applicant requires only one opening for both entry and exit of tokens or coins. Sollenberger uses a coin slot for entry so the cash box does not require an unlocking arrangement at the coin collecting location (which in his case is a parking meter). By duplicating the unlocking arrangement in the collecting area (fare box) the applicant's single large opening is capable of accepting both tickets and coins. Using the Sollenberger concept for unlocking the cash box when placing it in a fare box receptacle does not possess any element of invention.

According to the applicant the use of a receptacle and cash box together as a unit in each bus is not shown in the teaching of Sollenberger. We observe that the use of a cash box inserted into a fare box with its attendant locking or unlocking arrangement is shown in the Grant patent, which is also designed to stop pilfering. Selection of the Sollenberger cash box with its unlocking receptacle arrangement in the fare box as well as in the vault does not provide "that scintilla of invention necessary to support the patent."

On considering the difference between the cited art and claim 1 we find that Grant relates to a fare collection box of the type found in buses. Sollenberger shows the concept of unlocking a cash box when placing it in a special receptacle. In our view fitting a fare collection box with this special receptacle, as is covered by claim 1, is not patentable subject matter.

Claim 2, which depends on claim 1, adds a door with a window to show the presence of the cash box in the fare box receptacle. There is no patentable feature in such an addition, and our comments with respect to claim 1 also apply to claim 2.

Claim 15 differs from claim 1 in that the access opening is defined as being rotatable within the receptacle. However, the objections to claim 1 apply equally to this claim, and it also fails to make patentable advance in the art.

Claim 16, which is dependent on claim 15, adds a vault for collecting fare from a plurality of cash boxes. We find that applicant's divisional application no. 198671, which matured as patent no. 988,896, claims "Apparatus for collecting fares and the like comprising a plurality of cash boxes for the deposition of fares at various locations with the fares being thereafter brought to a common collection location, a vault construction at said location...". Since the applicant already has patented the combination of a cash box with a vault, we consider claim 16 would constitute an extension of monopoly, and is not allowable in this application.

At the hearing the applicant argued that his device made extensive modifications to the cited art. Such modifications are, however, protected by claims 3 to 8 which the examiner considers allowable. We agree with his conclusions with respect to them. However, we find that claim 9 is so similar to rejected claim 16 that we recommend that claims 9, 10 to 14, which depend on it, should be returned to the examiner for further consideration.

We agree that increased security may flow from putting in a plurality of devices that previously existed into one device. This increased security, however, flows from an idea lacking in patentable merit. On this point we refer to Drysdale and Sidney Smith & Blyth Limited v. Davey Paxmon & Company (1939), 55 R.P.C. 95 at page 113, where Luxmoore J., said: "An

attempt has been made to displace the argument that the invention lacked subject matter by setting up a number of advantages which were alleged to result from the use of the device; but if no ingenuity is involved in the application of the idea, no amount of proof of its practical utility can save it from being invalid from want of subject matter."

The comments of the court, in Lowe Martin Co. Ltd. v Office Specialty Manufacturing Co. Ltd. (1930) Ex. C.R. 181, are also pertinent: "The mere carrying forward of the original thought, a change only in form, proportion or degree, doing the same thing in the same way, by substantially the same means, with better results is not such an invention as will sustain a patent" (page 187 line 9), and "It is always necessary to consider the rights of the general public to avoid monopolies on such simple devices as would occur to anyone familiar with the art."

For the reasons indicated above, the Board is of the opinion that claims 1, 2, 15 and 16 be refused and that claims 9 to 14 be returned to the examiner for further consideration.

G.A. Asher
Chairman
Patent Appeal Board

I concur with the findings of the Patent Appeal Board. Claims 1, 2, 15 and 16 are refused. The applicant has six months within which to remove the claims, or to appeal this decision under provisions of Section 44 of the Patent Act. Claims 9-14 will be the subject of further examination after claims 1, 2, 15 and 16 are disposed of, unless the applicant voluntarily elects to delete them as well.

J.H.A. Gariépy
Commissioner of Patents

Dated at Hull, Quebec
this 3rd. day of September, 1976

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