

BLO 1095/89

PATENTS ACT 1977

IN THE MATTER OF a reference
under Section 8(1) by Kabanos
Proprietary Limited in respect of
patent application No 8609035
(published under Serial Number
2174227) in the name of
Coin Controls Limited

DECISION

The patent application in suit, 8609035 (hereafter "Coin II"), was filed on 14 April 1986 claiming the priority of application 8509609 (hereafter "Coin I") filed on 15 April 1985, and was published under Section 16 on 29 October 1986 under Serial Number 2174227. The sole inventor named on Patent Form 7/77 is Adam Rawicz-Szczerbo and it is stated that the applicants, Coin Controls Limited (hereafter "Coin"), own the invention by virtue of Section 39(1).

The invention of Coin II relates to apparatus for discriminating between different metallic articles and in particular to the recognition and testing of coins e.g in multicoin validators as used for example in vending applications.

Claim 1 reads

"1. A coin validator comprising a coin rundown path and first and second sensor means for sensing characteristics of a coin travelling along the path wherein:

the first sensor means comprises an inductive sensor responsive to the material of which the coin is made, and

the second sensor is a non-inductive non mechanical sensor responsive to coin diameter, and comprises first

and second detector stations along said path for producing respective signals as the coin passes through the stations, and means responsive to said detector station signals to provide an output which is a function of the diameter of the coin."

Claims 2 to 10 are directly or indirectly appendant to claim 1.

Claim 2 qualifies the detector station signal responsive means as including means responsive to the signals from both of the stations to derive a signal which is a function of coin speed, means responsive to the signal from one of the stations to derive an interval signal which is a function of coin speed and coin diameter, and means responsive to the interval signal and the coin speed signal to derive a signal indicative of coin diameter.

Claim 3 prescribes the second sensor as comprising an electrostatic sensor which, in claim 4, includes electrode means arranged along the path to define the detector stations such that passage of a coin along the path affects capacitive coupling therebetween for the stations respectively. Claim 5 prescribes that the electrode means comprises a transmit electrode at a first potential, and receive electrodes at a second potential and arranged on opposite sides of the transmit electrode along the coin rundown path.

Claim 6 provides for an alternative form of second sensor in the form of an optical sensor in which, in claim 7, each detector station comprises a light source and a light detector for passage of a coin therebetween.

Claim 8 provides for a third sensor for sensing coin thickness, which, in claim 9, comprises first and second electrode plates arranged on opposite sides of the coin rundown path to permit passage of a coin therebetween, means for applying a potential difference to the electrode plates,

and means responsive to changes of potential difference between the electrode plates produced in response to passage of a coin therebetween for producing a signal indicative of coin thickness.

Claim 10 includes means for comparing signals from the sensor means with stored values thereof to determine coin authenticity.

Claim 11 reads

"11. A coin validator comprising
a coin rundown path;
a sensor including first and second detector stations along said path and each for producing respective signals indicative of the duration of passage of a coin through the station; and
means responsive to said signals to provide a signal indicative of coin diameter."

Claims 12 to 14 are omnibus claims which refer to Figures 1, 1 to 3, and 4 respectively.

Application Coin I was not pursued beyond the application stage and was not published under section 16. Coin I, which contains no claims, relates to an apparatus for discriminating between different metallic articles, comprising electrostatic sensor means responsive to dimensional characteristics and inductive sensor means responsive to the material of the article. A coin mechanism is described comprising an electrostatic diameter sensor consisting of three capacitor plates, illustrated as being in adjacent (side by side) relationship, with a central transmit plate and two outer receive plates, which may be incorporated onto printed circuit boards or form part of a printed circuit board which carries electronic components. The mechanism also comprises a coin thickness sensor consisting of a parallel two plate capacitor with plates either side of the coin path, and an inductive sensor which creates an

alternating or pulsed magnetic field generating eddy currents the magnitude of which, and the consequential energy loss from the magnetic field, is related to the coin material.

On 28 May 1987 Kabanos Proprietary Limited (hereafter "Kabanos", or "the referrors"), an Australian Company, made a reference to the Comptroller under section 8(1)(a). Their statement under rule 7(1) alleges that the subject matter of the application in suit and of its priority application 8509609 was at all material times the property of Geoffrey Howells or the referrors, to whom Mr Howells has assigned all his rights to the subject matter, and that Coin are not entitled either to the subject matter or to the grant of a patent on the application in suit and have no rights in the subject matter whatsoever. The referrors do not expressly set out in their statement the question they are referring, but since their reference is under section 8(1)(a) I take it that the question must be

"whether [they] are entitled to be granted (alone or with any other persons) a patent for [the] invention [forming the subject matter of the application in suit and of its priority application] or have or would have any right in or under any patent so granted or any application for such a patent".

The referrors' statement contends that the subject matter was invented prior to 9 April 1985 by Mr Howells, who on that day instructed his patent agent Nigel Brooks to file a patent application relating to the subject matter, the application being duly filed on 10 April 1985 as application 8509202 (hereafter "Howells I"). It is asserted that Mr Howells disclosed the subject matter in confidence to Coin at a meeting in Oldham on 10 April 1985 at which Mr Rawicz-Szczerbo was present.

The referrors ask for a declaration for transfer of the application in suit into their name as rightful applicants,

together with the right to insert their own claims into the application, or a declaration that they are entitled to file a new application relating to the subject matter of the application in suit and its priority application and taking the priority date of 15 April 1985, or a declaration that they are entitled to file a new application relating to that subject matter and taking the priority date of 15 April 1985 and the subject matter of application 8511163 (hereafter "Howells II"), filed by Mr Howells and dated 2 May 1985, and taking the priority date of 2 May 1985, and such other relief as the Comptroller shall think fit. The referrors also ask for their costs.

On 16 September 1987 Coin filed a counterstatement under rule 7(3) in which they oppose the requested order and relief sought, deny the allegations made in the statement, and ask for their costs.

Subsequently, the referrors filed evidence in the form of sworn declarations by Nigel Samuel Brooks, Geoffrey Howells and Colin Kenneth Leonard Chapman, the declarations of Messrs Brooks and Howells being supported by exhibits. I would note at this point that the declarations of Mr Howells and Mr Chapman are headed as being "in the matter of reference by Maitec PTY Limited (formerly Kabanos Proprietary Limited)".

In their letter dated 23 February 1989 Venner, Shipley & Co, patent agents for Coin, indicated that no evidence was to be filed in support of the counterstatement. In a later letter dated 20 April 1989 they confirmed that they did not wish to attend a hearing, leaving the Hearing Officer to decide the case on the basis of papers presently filed. In a letter of the same date the patent agent for the referrors, Nigel Brooks, also asked for the matter to be decided without a hearing. I shall therefore proceed to decide the issue on the papers before me.

I turn first to the declaration of Mr Brooks. Mr Brooks

declares that, after he was consulted by Mr Howells on 9 April 1985 concerning a coin handling apparatus invention which might be of interest to a company Mr Howells was to visit the next day, he filed patent application Howells I on behalf of Mr Howells on 10 April 1985. Subsequently, Mr Brooks states, he drafted and filed a new patent application, Howells II, relating to the same invention and dated 2 May 1985. I note that it is a matter of public record that neither application was pursued further and that neither was published under Section 16.

A copy of Howells I is exhibited to Mr Brooks' declaration. It describes a coin acceptor in which capacitor plates are located side by side along one side of the coin path such that when a coin passes the plates a signal is transferred from a transmitter plate to a receiver plate via the coin, the signal is measured and timed and the values are compared with stored reference values. The plates may be formed by the tracks on a printed circuit board on which electronic components are mounted. Though the basic detector is shown as having only two plates, improved versions for measuring the diameter of a coin include a single transmitter plate located between two receiver plates. Coin thickness can additionally be measured by a two plate detector on the opposite side of the coin path from the plates of the diameter sensor. The coin channel is tilted so that the coin rolls against the face adjacent the plates of the diameter sensor, and a measure of coin thickness is obtained based upon the fact that the plates of the thickness sensor are spaced from a coin which is narrower than the channel by more than the plates of the diameter sensor. The apparatus can also include a pulse induction metal detector coil to measure the conductivity of the metal from which the coin is made.

A copy of Howells II is exhibited to Mr Brooks' declaration. It relates to a coin handling apparatus comprising a coin track defining at least part of a coin path through the apparatus, at least one capacitor plate arranged adjacent the

coin track whereby a coin passing along the coin path forms an electrical capacitor with the plate, means for applying an electrical signal to the capacitor, and means for detecting the presence of the coin adjacent the plate by measurement of the capacitance of the capacitor. The simplest apparatus envisaged merely involves counting coins of known authenticity, but more sophisticated versions involve authenticating coins and/or counting coins of different denominations. A number of embodiments are described, some of which employ and expand upon those in Howells I.

I turn now to the declaration of Mr Howells. He describes how he and a number of others attended a meeting at the premises of Coin on 10 April 1985, and how, during the course of that meeting, he had a private discussion with Mr Bellis, said to be Managing Director of Coin, and Mr Rawicz-Szczerbo, whom he describes as Mr Bellis's technical assistant. He asserts:-

"13. I did not myself expressly discuss whether the information I was about to reveal was confidential with either Mr Bellis or Mr Rawicz-Szczerbo. In fact confidentiality was apparent from the circumstances. I explained the invention in full to Mr Rawicz-Szczerbo. I am certain that he did not understand the invention fully the first time round, but he did do so after I explained it a second time. I am quite convinced that he had no idea of this invention before I discussed it with him, and could not have thought of it before. He was impressed with my idea.

14. The new invention is an electrostatic coin acceptor. To the best of my knowledge and belief all the previous purely electronic coin acceptors relied on coils of wire driven by either of the two systems earlier described in order to identify the coins. The new system I invented does not rely upon the use of a coil of wire but uses capacitor plates and the coin

rolls past these three plates. In the preferred form it uses three capacitor plates, the electronics measure the capacitance, which is a physical property, between the coin and the three plates as the coin rolls past.

Because there are slight gaps between the three plates, as the coin rolls past the capacitance varies in respect of the three plates. The electronics I proposed process this information and can determine the diameter of the coin, and therefore its denomination, regardless of the speed that it rolls down the slot."

Later in his declaration Mr Howells states:

"22. I have also noted that the arrangement of the three capacitor plates in the Coin Controls specification with the centre plate being a transmitter and the other two being receivers is identical to that disclosed by me at the meeting with Coin Controls."

Despite the fact that Mr Howells' description is not altogether clear as to what constitute the essential features of his invention (in particular as to whether it necessarily comprises three plates), I conclude that the invention he outlines in paragraph 14 of his declaration is essentially that of Howells I and Howells II, namely an electrostatic coin acceptor using capacitor plates past which a coin rolls. In at least the preferred form there are three plates, enabling coin diameter to be determined. Furthermore, although Mr Howells does not expressly state that this is exactly what he described to Mr Rawicz-Szczerbo, in the absence of evidence to the contrary I conclude that I can properly assume that this is so. There is no evidence that Mr Rawicz-Szczerbo was already aware of or had independently devised that invention, and I am therefore satisfied on the evidence that Mr Howells devised it and that, at that time, it rightly belonged to him. I am also satisfied that Mr Howells did not, in disclosing his invention to Coin, thereby transfer to them any rights in it.

Even though it is clear from Howells I that Mr Howells had envisaged a coin acceptor comprising an inductive sensor responsive to the material of which the coin is made in combination with the detector referred to in the preceding paragraph, there is no evidence that he disclosed such a combination to Coin at the meeting on 10 April 1985. Furthermore there is no suggestion in the evidence that Mr Howells disclosed at that meeting the particular circuitry shown in Figure 2 of Coin II, or a combination of an inductive sensor and an optical sensor responsive to Coin diameter. Consequently I am not satisfied that the referors have proper claim to this subject matter of the application in suit.

Before leaving Mr Howells' declaration I note that he states that he subsequently agreed to sell his rights to his invention to Kabanos, and a copy of the Agreement dated 1 January 1986 is exhibited to his declaration. The Agreement is directed specifically to the invention which is the subject matter of application Howells II, and by it Mr Howells assigned

"to Kabanos as beneficial owner all rights, title and interests through the world in the invention and the application, to the intent that the grant of any patents on the application will be in the name of and vest in Kabanos".

He also warranted "to Kabanos that he is the sole beneficial owner of the application and that no third party is entitled to any rights in respect thereof".

Finally the Agreement stated that "information describing the principles of the invention has only been disclosed to Coin Controls Ltd at a meeting held at their offices in Oldham in April 1985 and to staff at Entersword Ltd during 1985".

I therefore conclude that Mr Howells' former entitlement to what I have identified as his invention has subsequently been transferred to, and now rests with, Kabanos.

It will be apparent from the descriptions I have already given of the subject matter of Coin I and Coin II that, while both these applications incorporate Mr Howells' invention as part of their disclosure, there is a marked difference in emphasis from Mr Howells in their presentation of the essential nature of the invention itself, and both applications contain matter which does not on the evidence appear to have originated from Mr Howells. However, Coin's patent agents' letter of 23 February 1989 contains the following passage:

"1. The Applicants have decided to allow Application 8609035 (the application in suit) to lapse by failing to reply to the Official Letter that was issued on 8th February 1988.

2. It is submitted that the application in suit is clearly invalid in view of the disclosure of the invention by Mr Howells to Coin Controls at the meeting on 10th April 1985 at Oldham, as discussed in paragraph 11 of the Declaration of Geoffrey Howells dated 25th January 1988."

While I would comment in passing that it is well established that the question of validity is not one for consideration in section 8 proceedings, I nevertheless construe paragraph 2 of the letter as an acknowledgement on behalf of Coin that what Mr Howells disclosed to them at the meeting as his invention was of central importance to the invention or inventions in respect of which they subsequently filed applications Coin I and Coin II.

In all the circumstances I find, in response to the matters referred to the comptroller under section 8(1)(a), that the

subject matter of patent applications 8609035 and 8509609 (respectively Coin II and Coin I), only in so far as it comprises an electrostatic sensor for determining coin diameter, was at all material times the property of Geoffrey Howells or the referrors, and that the referrors, as Mr Howells' assignees in respect of that subject matter, are entitled to that subject matter. It follows that I find also that Coin have no right in that subject matter whatsoever and, in particular, are not entitled to the grant of a patent in respect of that subject matter on the application in suit.

The issue of whether the disclosure to Coin by Mr Howells was in confidence and hence does not constitute a prior disclosure of his invention is relevant to the question of relief to be accorded to the referrors, and I therefore address it now.

As stated in paragraph 13 of his declaration recited above, Mr Howells did not expressly discuss with Coin whether the information he revealed was confidential, but he asserts that "confidentiality was apparent from the circumstances". These circumstances are described more fully in the declaration of Mr Chapman who, as managing director of a company involved in computerised cash processing systems, had been holding discussions with Mr Howells. The company had gone into receivership in February 1985 and its assets were sold, terminating Mr Chapman's employment, on 2 April. Mr Chapman states that a few days later he attended the same meeting at Coin's premises as that described by Mr Howells. He states that the meeting had been arranged by him (Mr Chapman) in connection with the formation of a new systems company to be funded by Coin's parent company. A number of possible employees of the proposed company attended, together with Mr Howells and himself. He states:

"9. Mr Howells was asked to attend the meeting as a result of my agreement to introduce him to Mr Bellis,

although it was not the intention of the new company to develop a coin-acceptor in Shrewsbury. I was at the time self-employed and had no management authority over the engineers. Mr Bellis agreed to take all of the visitors around the Coin Industries factory, including into the design and development areas and he specifically requested me to confirm on behalf of all persons I had brought including Mr Howells and myself, that all the conversations that took place would be retained in confidence on both sides. This was particularly important in view of the fact that CASE Cash Processing [the company which had purchased the assets of Mr Chapman's company] were competitors of Coin Industries. On behalf of all the visitors and myself, I agreed that all conversations would be in confidence on both sides.

10. On the arrival of Mr Howells, who arrived with the two Design Engineers, Mr Bellis asked me to leave his office so that he could have a conversation in private with Mr Howells. I agreed to leave, and I am unaware of the details of the conversation that took place. I was aware that during this meeting Mr Bellis and Mr Howells were joined by Mr Adam Rawicz-Szczerbo who was known to me as the Senior Electronics Design Engineer of Coin Industries. I was unaware at that time of the Provisional Patent filed by Mr Howells on April 10th.

11. I gave no consideration as to how Mr Howells would wish to protect his invention [the technical details of which Mr Chapman earlier states that he did not know at the time of the meeting], but as mentioned above I had taken the precaution of ensuring that the meeting was confidential. The very circumstances of the meeting, including the manner in which it was convened, its purpose and the personnel involved were in any event such that one would naturally expect all details to be kept confidential. This is borne out by the invitation

by Coin Controls Limited for employees of existing competitors to tour its factory and research and development laboratory.

12. On touring the factory premises and laboratory, Mr Rawicz-Szczerbo disclosed details to me and others of a Sentinel coin acceptor which was still in the course of development, and he would not have been likely to do this unless he and Mr Bellis (who was also present) regarded the meeting as confidential."

Although Coin's patent agents' letter of 23 February 1989 submits that "there was clearly no fetter of confidence in regard to the disclosure of the invention", there is no sworn evidence from Coin that the private conversation between Mr Howells, Mr Bellis and Mr Rawicz-Szczerbo was exempt from the blanket fetter of confidentiality, and I conclude that the disclosure by Mr Howells was in confidence. Consequently, I do not consider that disclosure as constituting a publication destroying the novelty of his invention.

Section 8(1) states that the comptroller, having determined the question referred to him, may make such order as he thinks fit to give effect to the determination. Subsections (2) and (3) set out certain orders that the comptroller may make in particular circumstances of a reference under subsection (1)(a), but without prejudice to the generality of the powers afforded him under subsection (1). I need only refer to subsection (2)(c), which states that the comptroller may

"(c).... order the application to be amended so as to exclude any of the matter in respect of which the question was referred;"

and subsection (3), which states that

"(a) [where] the comptroller orders an application for a patent for the invention to which the question [referred

under subsection (1)(a)] relates to be so amended;

(b).....

(c).....

the comptroller may order that any person by whom the reference was made may within the prescribed period make a new application for a patent for the whole or part of any matter comprised in the earlier application or, as the case may be, for all or any of the matter excluded from the earlier application, subject in either case to section 76 below, and in either case that, if such a new application is made, it shall be treated as having been filed on the date of filing the earlier application."

Considering first the relief sought by the referrors, since the application in suit contains matter over and above that disclosed by Mr Howells, to which I have concluded that, on the evidence, the referrors have no claim, it would be inappropriate for me to adopt the first remedy requested, namely to transfer the application in suit into the name of the referrors as rightful applicants.

For the same reason the remedy proposed in the second alternative, in which the referrors seek entitlement to file a new application relating to the subject matter of the application in suit and its priority application, and taking the priority date of the application in suit, 15 April 1985, is inappropriate.

I also reject, partly for the same reason, the remedy proposed in the third alternative, which differs from the second by requiring the new application to relate not only to the subject matter of the application in suit taking the priority date of 15 April 1985, but also the subject matter of Howells II taking the priority date of 2 May 1985. I am not clear how the referrors intended to draft such a new

application but I would point out that Howells II contains subject matter over and above that of Howells I and what Mr Howells declares he disclosed to Coin. Furthermore, I do not interpret section 8 as a instrument for resuscitating the subject matter of an application which the applicant of his own volition did not pursue at the appropriate time.

Clearly Coin II, the application in suit, cannot be allowed to proceed in Coin's name containing subject matter to which I have found Coin to be not entitled. Although it is Coin's stated intention to allow the application to lapse, it is still formally in being, and I therefore order, as prescribed by subsection 8(2)(c), that, should the application proceed, it be amended so as to exclude that matter.

Having thus dealt with what Coin are not entitled to, I come to the more difficult question of what order I should make to enable the referrors to secure that to which they are entitled. In an unpublished decision of 4 April 1989 in a reference under section 8(1) in respect of patent applications by the Amateur Athletics Association ("AAA") and another, the hearing officer dealt with a very similar situation by what he acknowledged to be the "cumbersome and inconvenient" procedure of ordering that the referrer could file two new applications respectively relating to matter in earlier and later AAA applications, the former serving as priority for the latter. Only in that way would the referrer be able to obtain protection for all the matter to which he was entitled while ensuring that the already-published later AAA application did not form part of the state of the art in relation to the second new application, thus invalidating it.

To achieve an equitable outcome in the present case I need to devise an order which achieves those same objectives. As I have already indicated, the subject matter from Coin I and Coin II to which the referrors are entitled is limited, and it seems likely to me that there is little if any of such matter in Coin II which is not in Coin I. Nevertheless I

conclude that the proper procedure for me to follow is essentially the same "cumbersome and inconvenient" one employed in the AAA case.

I therefore order that the referrors may, within the period allowed by rule 10 of The Patent Rules 1982, file a first new application in respect of matter contained in application Coin I and, within the same period, file a second new application in respect of matter contained in application Coin II, the matter in each case being that which I have above determined to have been Mr Howells' invention. I further order that if such first and second new applications be filed without contravening section 76 they be treated as having filing dates of 15 April 1985 and 14 April 1986 respectively. It will be necessary to declare the first new application for priority purposes when the second new application is filed. Like the hearing officer in the AAA case, I refer to rule 10 as a convenient means of defining the period within which such new applications should be filed, although the order I have made is not in all respects as prescribed in section 8(3).

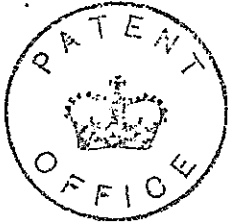
Turning to the matter of costs, having regard to all the circumstances I award the referrors the sum of £250 as a contribution to their costs and direct that this sum be paid to them by Coin Controls Limited.

As I mentioned earlier in this decision, it would appear that the referrors are now known as Maitec Pty Limited. No formal notification of this change in title has been made in these proceedings and accordingly the decision is issued in respect

of the reference made in the name of Kabanos Proprietary Limited.

Dated this 8th day of August 1989

DR P FERDINANDO
Superintending Examiner, acting for the Comptroller



THE PATENT OFFICE