

## **PATENTS ACT 1977**

### **IN THE MATTER OF**

Patent Application Number

9407338.4 in the name of

Mr Charalambous Portelli.

### **DECISION**

Application 9407338.4 and its specification were filed on the 19<sup>th</sup> April 1994 by Mr Portelli who at that time was acting on his own behalf without professional assistance. On the 16<sup>th</sup> May 1995 Carpmaels & Ransford wrote to the Office stating that they had been instructed to act on Mr Portelli's behalf and enclosing claims and an abstract. Subsequently, during the course of substantive examination, the examiner objected that the invention claimed was not novel in the light of a number of prior published patent specifications. Discussions between the examiner and Mr Portelli's agents did not resolve this matter, with the examiner maintaining his view that the invention was not novel in the light of two published patent specifications, EP 0559074A (Motorola) and WO 93/16452 (Simms Industries). Consequently the matter came before me at a hearing on the 27<sup>th</sup> January 1998 when Mr Anthony James of Carpmaels & Ransford and Dr Richard Puhlam represented Mr Portelli.

Mr Portelli's invention concerns a portable, hand-held emergency alarm transmitter containing a Global Positioning Satellite (GPS) receiver to derive the position of the transmitter so that when the transmitter is manually actuated it sends a radio signal via a two-way radio link to a receiver station to specify the existence and location of an alarm condition whereby the appropriate emergency services can be notified.

At the hearing, Mr James readily agreed that the relevant law in relation to novelty is that set out in *General Tyre & Rubber Company v Firestone Tyre & Rubber Company Limited* 1972 RPC 457 which indicates that a prior published document is novelty destroying if it contains clear and unmistakable directions to do what the patentee claims to have invented. In the present case

however, the unresolved issue relates not so much as to what the prior documents teach but rather as to what Mr Portelli claims to have invented, and in particular as to the proper construction to be put on Mr Portelli's claims.

The claims as they stood at the hearing read as follows :

1. A portable hand-held emergency alarm comprising :  
activation means to enable activation of the alarm by a user in an emergency;  
  
a satellite navigational and locating system including a global positioning satellite (GPS) receiver; and  
  
a transmitter adapted to establish a two-way link to a receiver station to provide simultaneous dual functions of determining the location of the emergency alarm by the satellite navigational and locating system, and retransmitting to appropriate emergency services an alarm signal comprising information identifying the user and the location of the emergency alarm.
2. A portable hand-held emergency alarm according to claim 1, wherein the transmitter is adapted to transmit a plurality of said alarm signals to a plurality of different emergency services.

The cited specification EP 0559074 shows a hand-held mobile radio unit with a GPS receiver and a transmitter which sends local position information and an emergency message. The message may be received by a base station which may pass the position information to a rescue station or to a mobile rescue unit, as described a helicopter which can then proceed directly to provide assistance. In an embodiment, an acknowledgement signal may be sent back to the portable unit by the base station or a satellite.

Cited specification WO 93/16452 shows a portable unit which has a GPS receiver, which may be hand-held, and which communicates emergency data including position co-ordinates to a central

despatch station which displays all the necessary emergency information and from which an operator can contact the portable unit over a voice channel if required.

Thus it is clear that in the broadest sense, both cited specifications provide hand-held units with a GPS receiver, the units being activated in an emergency to transmit information relating to the emergency and the location of the unit to a base station which can relay this information to the appropriate emergency service or services. In citing these specifications the examiner had construed the claims broadly, so that for example the reference in claim 1 to "a two-way link to a receiver station" meant any two-way link, such as in the cited specifications where acknowledgement or voice communications can be sent back to the portable unit, and similarly that the requirement of "dual functions" just meant the two functions of determining the location and sending a signal to the emergency services which are claimed and which are described in the cited specifications. Mr James however urged me to construe the claims in a much more restrictive, and detailed way.

Mr James argued that the novel features of the invention were set out in claim 1 in lines 10 to 15 which require that there should be :

"a transmitter adapted to establish a two way link to a receiver station to provide simultaneous dual functions of determining the location of the emergency alarm by the satellite navigational and locating system and retransmitting to appropriate emergency services an alarm signal .... "

Mr James submitted that the critical parts of this are the references to "a two way link" and to "simultaneous dual functions" which he said necessarily meant that there was a full duplex mode of operation in which when the user pressed a button on the hand held unit to send an alarm signal to the base station, the base station responded by sending initialisation information to the GPS system in the unit telling it where the appropriate satellite is located. In this respect, I note that Dr Puhlam argued that the sort of initialisation information which was sent to the portable unit may be, for example, the particular country in which the portable unit is located. In any event, the thrust of the argument was that the initialisation information enables the portable unit to

produce, and to send to the base station, an accurate position fix a good deal more quickly than would otherwise be the case. Mr James, and also Dr Puhlam, argued that this initialisation was an inherent function of the two way link which is claimed in claim 1 of the application in suit but that the citations did not disclose any initialisation of the GPS system from the base stations and consequently did not anticipate the invention claimed.

As I said at the hearing, and Mr James agreed, even though this initialisation step may indeed be included in a practical embodiment of Mr Portelli's system as this has now been developed, the question I have to address is whether this construction of the claim is supported by the disclosure of the specification as this was originally filed. The specification as originally filed did not include any claims so the only thing to be considered is the original description and in this connection Mr James referred me to page 2 of the specification in the form in which it was published, especially at lines 29/30 and 34/36. It is I think helpful to see these passages in their context in the specification as filed which, in the form in which it was published, from line 8 on page 2 reads :

"A. We are basing our assumptions that receivers (FED Rescue Teams and Services) are fully in situ, and given the awareness and opportunity by authorised authorities, would it not follow with the improving technology that a portable hand-held device (approximately comparable and equivalent to the dimensions and weight of the existing portable telephone) be developed so as to incorporate a manually operated activating emergency unit/component?

Further, upon manual activation and operation it would allow the device to transmit, sending independent emergency signals via suitable allocated frequencies and to be received by capable bodies/services.

The appropriate response would be determined through the continuous information and feed at the disposal of the receiver station/base.

B. Additionally, this will incorporate within the device the relevant satellite navigational and locating system/GPS receiving facilities, and the necessary components and

requirements, so as to process and characterise a two way link and simultaneous dual function.

By way of example in an emergency situation

Once the device is activated it will both relay and alert emergency situation and services, whilst simultaneously identifying user details and location (wherever situated) its obvious benefits are a more efficient and faster method of alerting an emergency incident."

Having considered these passages, and indeed the whole of the specification as originally filed, very carefully, I cannot see any disclosure of, or support for, the construction Mr James was urging me to give to claim 1. Mr James argued that the skilled person on reading the original specification would immediately have understood that the reference to "a two way link" to the base station was a reference to full duplex mode operation with initialisation information being sent to the GPS in the portable unit from the base station. Mr James, and also Dr Puhlam who has been involved in the technical development of the invention, further argued that the idea of GPS initialisation comes directly from the original specification. They argued that given that the portable unit was a hand-held device with necessarily limited battery power and life, one would want to activate it only when it was needed in an emergency. Moreover given that the original specification referred to sending the emergency signal and position data in the shortest possible time, Dr Puhlam argued that waiting the several minutes that the skilled person would readily appreciate would be necessary without initialisation was not an option and that the step of initialising the GPS receiver in the portable unit necessarily followed from that. I have no difficulty with any of this except for the final, crucial step of saying that this solution, of sending initialising information to the portable unit, is disclosed in the specification as originally filed. In my view it is not. In my view Dr Puhlam has described a problem with what is described in the original specification, namely the slow speed of position location, and has himself provided a solution to that problem of sending initialisation information from the base station to the portable unit to speed up its operation. But it is I think Dr Puhlam's solution and not something that is disclosed in the original specification. The problem, and this solution, may have been obvious to the skilled person in the light of the original specification but I make no comment on that save to

say that I think that this is not the point. The point is not whether this solution would have been obvious to the notional skilled person, but whether it was disclosed in the originally filed specification in such a way as to provide support for the construction of the claims on which Mr James relied. I of course accept that disclosure can be implicit rather than explicit, and that disclosure is a matter of what the skilled person would have been taught by the original specification. Nevertheless, as I have said, I do not accept that this initialisation solution was in fact disclosed and I therefore do not accept that the claims should be construed as being limited to that solution.

In seeking to persuade me to take the contrary view, Mr James laid great emphasis on the words "two way link", "simultaneous" and "dual functions" in claim 1 but it seems to me that he was seeking to endow them with far more meaning and significance than they are capable of carrying. Though I am bound to say that it is not wholly clear from the original description precisely what is envisaged by these words, I find it impossible to conclude that they are saying anything about the initialisation of the GPS system from the base station as Mr James sought to argue. Indeed, it seems to me that these words say no more than that there is a two way link of some sort and that the unit does two things at the same time. The wording of the present claim 1 seems to suggest that those two things are a) determining the location of the hand-held unit, and b) transmitting to the emergency services an alarm signal identifying the user and the location of the emergency alarm. However, logic dictates that it is not possible to transmit information on the location of the unit until after that location has actually been determined so these two functions simply cannot be done truly simultaneously. At best this suggests that the word "simultaneous" as used in claim 1 cannot be construed narrowly but, for example, must allow for some time to elapse between the two functions.

On this basis it seems clear to me that claim 1 as it presently stands amounts to no more than a hand-held portable emergency alarm transmitter containing a GPS receiver to derive the position of the transmitter so that when the transmitter is actuated it sends a signal via a two-way link to a receiver station specifying that there is an alarm and giving information identifying the user and the location of the alarm. It also seems to me that both the cited specifications anticipate this construction of the claim.

Thus, WO 93/16452 refers at page 13 to a GPS receiver, and at pages 5 and 6 to the portable unit storing, and sending information to the base station over what is said at page 9 to be a two way link, the information including alarm information identifying the user and the location of the alarm. Similarly, EP 0559074 at column 4 refers to a GPS receiver and at column 12 to the portable unit sending information to the base station identifying the portable unit concerned and that an alarm condition exists. The base station responds, meaning that the communication is two way, whereupon the portable unit sends precise location information to the base station.

Beyond this, the only clear reference to simultaneity and dual functions in the original specification is in the passages to which Mr James referred me, and in particular reading from the Heading "B" to the end of the extract I quote above. It seems to me that all that is said here is simply the idea of simultaneously sending an emergency message together with user and location information and it is clear to me that precisely this is disclosed in WO 93/16452 at page 3, from line 15 which states :

"..., activating the mobile unit upon occurrence of an alarm condition to determine a position of the mobile entity and to generate a code indicative of the alarm condition, the identifier [of the mobile entity], and the position of the mobile entity, transmitting the code to a central station, and ...."

It therefore follows that in my view claim 1, when construed in a way which is supported by the original description, is not new.

At the hearing Mr James relied on his view of the proper construction to be put upon claim 1 and did not put forward any argument to suggest that claim 2 contains any features which distinguish it from the cited specifications. All that claim 2 adds is the requirement that the transmitter is adapted to transmit a plurality of alarm signals to a plurality of different emergency services and this is clearly shown in the cited specifications both of which clearly refer to contacting different emergency services.

It therefore follows that in my view the present claims are open to objection under section 1(1)(a)

and the question arises as to whether I should give the applicant an opportunity to amend the claims with a view to overcoming this finding. In this case however I do not think that this would serve any useful purpose. I see nothing in the original, somewhat skeletal description which could support a novel claim and accordingly I hereby refuse the present application under section 18(3).

Any appeal from this decision should be filed within six weeks from the date of the decision as set out below.

Dated this 11<sup>th</sup> Day of February 1998.

**D M HASELDEN**

Principal Examiner, acting for the Comptroller.

**THE PATENT OFFICE**