

“Vital Pad +” which better characterises the essential features of the invention. It was agreed that Ms. Buckland would be given until 9 November 2018 to provide any such claim, and the claim was duly filed by Ms Buckland on 9 November 2018.

The Issues

GB1500399.9 - Vital Pad +

- 5 In his pre-hearing report dated 6 February 2017, the Examiner maintained that the invention defined by the claims lacks an inventive step by virtue of it being both obvious and a collocation, that the claims are unclear, and that the invention as a whole is insufficiently disclosed by the application. Although if the application proceeds it will need to be addressed, I think we can put the clarity objections to one side for now as the other issues have a greater bearing on the fate of this application.

GB1604348.1 - Physicians Eye

- 6 In her pre-hearing report dated 22 May 2017, the Examiner maintained that the invention defined by the claims lacks an inventive step by virtue of it being both obvious and a collocation, and that an amendment to claim 2 adds matter to the application.

The Claims

GB1500399.9 - Vital Pad +

- 7 The claims as filed contained a single independent claim. The amended claims filed on 5 May 2015 did not make any amendment to claim 1, which reads as follows:

1. A waterproof, shock resistant lockable, sizeable strap with water temperature reader, microphone, screen colour changing pin, tension indicator, skin contact sensor, optical sensor, ECG, thermistors, light emitting diodes, wireless technology with coded difference, barcode, DGPS microchips, circuit board, rechargeable battery and long life battery, communicated to: A waterproof, shock resistant, shatterproof, sizeable, multilingual, touch multiscreen pad comprising: data for receiving information from strap, a touch multiscreen showing the following icons from APPS: patients name, date of birth, ward number, bed number, blood group, allergies, permanent medication for hospital and care home use, name, date of birth, blood group, allergies, permanent medication, GP info for public use, name, blood group, allergies, permanent medication, date of birth, animal, breed, kennel number for vet use, information from plugged in devices, indoor app, home screen, prescribed drugs chart with built in multiple choice drugs list, medical journals, drugs used from ward supply, drugs ordered to chemist, time, date, signature, fingerprint scanner, retina scanner, space for physicians notes, alarms, tension indicator receiver, heart rate, temperature, pulse rate, blood pressure, oxygen saturation levels, water temperature received from strap, room temperature, barcode reader, speaker, rechargeable battery, mains adapted, attached stylus, side portal multi connections, CD slot SD card slot, memory stick slot, attached wireless ultrasound scanner and changeable heads, adapted for attaching said pad to beds, cots, cages and so forth, specially designed bags for attaching the pad, a main database, with a wide scope for use.

- 8 The amended claim 1 provided on 9 November 2018 reads as follows:

1. A limited access unit capable of storing information, safeguarding Physicians and Patients alike whilst constantly monitoring patient's vital signs using the latest technologies including ECG,

thermistors, light emitting diodes, coded wireless technology, skin contact sensors, optical sensors, DGPS, microchips with circuit boards

- 9 Whilst being more concise than the original claim 1, this amended claim does not include what are clearly essential features of the invention, i.e. the presence of and communication between a patient 'strap' and a physician 'pad'. I will therefore not consider this claim any further, and will base my decision on the original claim 1.

GB1604348.1:- Physicians Eye

- 10 The claims as filed contained a single independent claim, it being clear that the apparently separate claims 7 and 8 should have in fact been a single claim. The amended claim 1 filed on 27 February 2017 reads as follows:

1. According to the present invention there is provided not least, a vital signs and physician, patient communicating system including: a size adjustable, size adaptable, digital wireless nametag which obtains constant vital signs readings from the wearer, using the latest technologies, displaying results to one side of a size adaptable, size adjustable, double-sided digital split touchscreen curved top, clipboard, a colour changing screen for allergy alert, displaying name, date of birth, ward number, bed number and blood group, said nametag is powered by rechargeable battery which is chargeable in charging dock supplied and can also be connected to said clipboard for charging or using, said clipboard for not least communication and protection for patient and physician and a size adaptable double - sided split touch screen master board with multiple attached wireless ultrasound and infrared scanners for not least receiving information from said clipboard, said clipboard and master board are mains adapted, have a rechargeable battery which is charged when said clipboard and master board are plugged into mains, both are also adapted for in car charging, all mentioned are coated in a wipe clean antibacterial material.

- 11 For this application claim 2 is also at issue, due to the objection to added matter. Claim 2 of the latest amendments on 27 February 2017 reads as follows:

2. Physicians Eye according to claim 1 wherein said digital clipboard being of back to back circuit boards and two screens enabling both sides of said clipboard to be used for two separate purposes, at the same time making them one sealed unit.

Added matter

- 12 I will consider the issue of added subject matter first as it is a distraction to the main substantive issues.

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- 13 In her pre-hearing report the examiner objected to the following wording in the amended claim 2 as adding matter contrary to s.76 of the Patent Act, with the offending section underlined.

'two screens enabling both sides of said clipboard to be used for two separate purposes, at the same time making them one sealed unit'

- 14 The examiner argued that this suggests that the clipboard can be used for two separate purposes at the same time (simultaneously), which was not disclosed in the application as filed. At the Hearing Ms. Buckland argued that is not how the claim should be read. Instead 'at the same time' should be read meaning 'as well' or 'also'.

- 15 With no punctuation I think the claim could be read either way. However, the presence of a comma prior to 'at the same time' suggests that Ms Buckland's construction of the claim is more appropriate. In contrast, were the comma after 'at the same time' I would consider the examiner's construction to me more appropriate. Therefore, with the wording and punctuation as it is, I do not consider that claim 2 comprises added matter.

Inventive step

The law

- 16 The law relating to inventive step is set out in section 1(1) of the Patents Act 1977 ("the Act") which states:

1(1) A patent may be granted only for an invention in respect of which the following conditions are satisfied, that is to say –

(a) the invention is new;

(b) it involves an inventive step;

(c) it is capable of industrial application;

(d) the grant of a patent for it is not excluded by subsections (2) and (3) or section 4A below; and references in this Act to a patentable invention shall be construed accordingly.

And references in this Act to a patentable invention shall be construed accordingly.

- 17 Section 3 of the Act states:

3 An invention shall be taken to involve an inventive step if it is not obvious to a person skilled in the art, having regard to any matter which forms part of the state of the art by virtue only of section 2(2) above (and disregarding section 2(3) above).

- 18 The approach to determining whether an invention has an inventive step or would be obvious to a person skilled in the art is set out in *Windsurfing International Inc. v Tabur Marine (Great Britain) Ltd*¹. This approach was restated and elaborated upon by the Court of Appeal in *Pozzoli SPA v BDMO SA*² where Jacob LJ reformulated the Windsurfing approach. However, in assessing claim 1 of each of the two applications in question, I do not believe that it is necessary to explicitly follow steps of this approach for the reasons set out below.

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- 19 Claim 1 includes many features, and the Examiner's pre-hearing report acknowledges this in identifying the inventive concept. In the report the Examiner combines the disclosure of Ms. Buckland's own previous published patent application - GB2505981 - with at least four other documents to arrive at the inventive concept of claim 1.

¹ *Windsurfing International Inc. v Tabur Marine (Great Britain) Ltd*, [1985] RPC 59

² *Pozzoli SPA v BDMO SA* [2007] EWCA Civ 588

Although it is not stated explicitly, I agree with the implication of the Examiner's report that the claimed inventive concept of claim 1 differs from GB2505981 in at least the following respects:

- (a) The strap communicates with a pad (i.e. tablet).
- (b) The strap having a screen colour changing pin
- (c) The tablet has wireless ultrasound scanners.
- (d) The tablet is adapted to be attached to bed, cot, etc.

20 Whilst all of these features are disclosed in at least one of the documents cited in the Examiner's report, I can see nothing in GB2505981 that would motivate the skilled person to include all of these features into a single system. Neither can I see anything in any of the other cited documents that would motivate the skilled person to include all of these features into a single system. I therefore find that the inventive concept of claim 1 is not obvious in view of the documents cited by the Examiner.

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21 Again, claim 1 includes many features, and again the Examiner's pre-hearing report acknowledges this in identifying the inventive concept. The report uses the publication of "Vital Pad +" (GB2530118) as the starting point of the inventive step objection, and identifies the differences between the inventive concept and what is disclosed in GB2530118. Although not in complete agreement with the Examiner's assessment, my assessment of the differences is not inconsistent, and can be summarised as follows:

- (a) The clipboard (i.e. tablet) is double sided.
- (b) The tablet is in communication with a double sided master board.
- (c) The master board has wireless ultrasound and infrared scanners.
- (d) The master board is mains adapted and has a rechargeable battery.
- (e) The tablet and master board have a wipe clean antibacterial coating.

22 The Examiner asserts that it is well known (i.e. common general knowledge) for a system of a wrist strap and tablet (or other mobile device) to be in communication with a server, this being common for fitness trackers which connect with a smart phone or tablet app, and that app connecting with a host server to allow data sharing. I do not disagree with this. The Examiner then combines this common general knowledge with the pad of GB2530118, several disclosures of double sided tablets, several disclosures of double sided display devices, and the uses of ultrasound scanners in relation to the pad of GB2530118.

- 23 However, I can see nothing in GB2530118 which would lead the skilled person to connecting a wrist strap and tablet system with a server such as the master board of the inventive concept, bearing in mind that that servers of the type asserted as common general knowledge would not obviously be both double sided and have ultrasound and/or infrared scanners. I therefore find that the inventive concept of claim 1 is not obvious in view of the documents cited by the Examiner.

Collocation

- 24 I now come onto the issue of whether or not claim 1 of each application contains a single inventive concept, or whether there are two or more collocated inventive concepts.

The Law

- 25 In *SABAF SpA v MFI Furniture Centres Ltd*³, Lord Hoffmann held that before you can ask whether the invention involves an inventive step, you first have to decide what the invention is. In particular, the first step is to decide whether you are dealing with one invention or, for the purposes of s.3, two or more inventions. If two integers interact upon each other, if there is synergy between them, they constitute a single invention having a combined effect and one applies s.3 to the idea of combining them. But if each integer performs its own proper function independently of any of the others, and the claim is a mere aggregation or juxtaposition of features, then each is, for the purposes of s.3, a separate invention. The combination of a series of known or obvious features, each playing its usual part in the final entity, is a matter of design or mere collocation, not of invention, and so is objectionable under s.3. In this decision, Lord Hoffmann provided guidance on how to determine whether two features display synergy. This guidance was re-stated and further explained in the EPO Technical Board of Appeal decision in T 1054/05:

Two features interact synergistically if their functions are interrelated and lead to an additional effect that goes beyond the sum of the effects of each feature taken in isolation. It is not enough that the features solve the same technical problem or that their effects are of the same kind and add up to an increased but otherwise unchanged effect.

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- 26 The inventive concept of claim 1 includes a strap and a pad in communication with one another. Many individual features of both the strap and pad are defined, and it is possible this could result in claim 1 being a collocation of all of these individual features. However, as many of the features are already disclosed in GB2505981, it is only necessary to consider those features which are not disclosed.
- 27 The majority of the features of the strap are disclosed in GB2505981, and it has already been established that the claimed inventive concept of claim 1 differs from GB2505981 in at least the following respects:

- (a) The strap communicates with a pad (i.e. tablet).

³ SABAF SpA v MFI Furniture Centres Ltd [2005] RPC 10,

- (b) The strap having a screen colour changing pin.
- (c) The tablet has wireless ultrasound scanners.
- (d) The tablet is adapted to be attached to bed, cot, etc.

28 These can be supplemented with the following further differences:

- (e) The strap has a barcode to be read by a barcode reader of the tablet.
- (f) The tablet has the further following features:
 - (i) Speaker
 - (ii) Rechargeable
 - (iii) Mains adapted
 - (iv) Attached stylus
 - (v) Side portal multi connections
 - (vi) CD slot
 - (vii) SD card slot
 - (viii) Memory stick slot
 - (ix) Water proof
 - (x) Shock resistant
 - (xi) Shatter proof
 - (xii) Sizeable
 - (xiii) Touch screen

29 Claim 1 also includes some reference to apps performing particular functions. However, any apps run by the tablet are not considered to be intrinsic features of the tablet itself, and are therefore not considered to form any part of the inventive concept of claim 1.

30 I will take each of the identified features of the claimed inventive concept in turn.

a)The strap communicates with a pad (i.e. tablet)

31 The fact that the strap communicates with a tablet (as opposed to a further strap as disclosed in GB2505981) has no bearing on the defined features of the strap or the tablet. All other features are carrying out their own usual function, and would continue to do so in the absence of a connection between the strap and a tablet.

b)The strap having a screen colour changing pin

32 Although not defined in claim 1, the description makes clear that the purpose of this is so that the colour of the screen can be manually changed using the stylus of the tablet to indicate that the patient has allergies. Again, this function has no relationship with any other feature of the strap or tablet. All other features are carrying out their own usual function, and would continue to do so in the absence of the strap screen being able to change colour.

c)The tablet has wireless ultrasound scanners

33 Again, the fact that the tablet has wireless ultrasound scanners has no relationship with any other feature of the strap or tablet. All other features are carrying out their own usual function, and would continue to do so in the absence of any wireless ultrasound scanners.

d)The tablet is adapted to be attached to bed, cot, etc.

34 Again, the fact that the tablet is adapted to be attached to bed, cot, etc. has no relationship with any other feature of the strap or tablet. All other features are carrying out their own usual function, and would continue to do so in the absence of the tablet being adapted to be attached to bed, cot, etc.

e)The strap has a barcode to be read by a barcode reader of the tablet

35 Although not defined in claim 1, the description makes clear that the purpose of this is to facilitate pairing of the strap and tablet, although presumably any data transfer would still need to be via Bluetooth(RTM), Wi-Fi(RTM) or similar. Again, this function has no relationship with any other feature of the strap or tablet. All other features are carrying out their own usual function, and would continue to do so in the absence of a barcode on the strap, and/or a barcode reader on the tablet.

f)The tablet has the further following features: Speaker, Rechargeable, Mains adapted, Attached stylus, Side portal multi connections, CD slot, SD card slot, Memory stick slot, Water proof, Shock resistant, Shatter proof, Sizeable, touch screen

36 The inclusion of speakers, a mains rechargeable battery, a stylus, side portal multi connections, a CD slot, a SD card slot, Memory stick slot and a touch screen are again all individual features of the tablet which have no relationship with each other, or with any other feature of the strap or tablet. All other features are carrying out their own usual function, and would continue to do so in the absence of any one of these further features of the tablet.

37 The tablet being water, shock and shatter proof are all indeterminable in scope. Any tablet will inherently have some resistance to these things, and so I do not consider that these definitions provide any meaningful limitation on the inventive concept.

38 Likewise the tablet being sizeable does not provide any meaningful limitation on the inventive concept. It is clear from the description that this means that any single tablet may be of any size as required, not that a single table may be size adjustable.

39 I therefore conclude that claim 1 does not define a single inventive concept, but that it defines a number of inventive concepts as identified above, and that it therefore

constitutes a collocation. However, a claim being a collocation is not an objection in its own right. An objection will only arise if it transpires that each part of the collocation is either known or obvious.

- 40 A patient monitoring strap which communicates with a tablet has been shown to have been known prior to the priority date of 11 September 2014 due to being disclosed in at least US2011/066010. Paragraph 0054 discloses a wrist worn transceiver that measures patient vital signs such as blood pressure, heart rate and temperature, and paragraph 0107 discloses that the wrist-worn transceiver can communicate wirelessly with a networked computer such as a tablet.
- 41 A tablet having wireless ultrasound scanners has been shown to have been known prior to the priority date of 11 September 2014 due to being disclosed in at least WO2013/148730 (the international phase publication of EP2830507 cited in the pre-hearing report). Page 10 lines 8-13 discloses an ultrasound scanner in communication with a tablet computer, and page 23 lines 13-20 discloses that the communication may be wireless.
- 42 A tablet that is attachable to a cot or bed is of course a definition by result, and its scope would include any method capable of performing this function. This has been shown to have been known prior to the priority date of 11 September 2014 due to being disclosed in US2012/019113. Disclosed is a tablet case comprising a plurality of flexible legs that can be manipulated into a variety of positions so as to support the tablet on a variety of objects. This would clearly be capable of supporting a tablet on a bed or cot, noting in particular the arrangement disclosed in figure 8.
- 43 The strap having a barcode which is read by a barcode reader of the tablet has been shown to have been known prior to the priority date of 11 September 2014 due to being disclosed in US2011/137680. Paragraph 0110 discloses a patient wristband having a barcode which can be scanned by a nurse's handheld device to receive patient ID data. Although not disclosed explicitly as a 'tablet', it is clear that the handheld device functions in the same way to the tablet of the present application, and so is considered to fulfil the meaning of the term 'tablet'.
- 44 The inclusion of speakers, a mains rechargeable battery, a stylus, side portal multi connections, a SD card slot, Memory stick slot and a touch screen were all extremely well known tablet features prior to the priority date of 11 September 2014, and constitute the common general knowledge of the skilled person, with no evidence being required to support this.
- 45 This leaves two of the identified features not being disclosed in the documents cited in the pre-hearing report, nor constituting common general knowledge. These are:
 - (a) The strap having a screen colour changing pin.
 - (b) The tablet having a CD slot.

Following some additional searching after the Hearing, CN102446285 was found. This document discloses a medical wrist strap intended for use in disaster recovery situations. A translation of the description discloses (with reference to figure 2):

This microprocessor 361 can controlling and driving this radio-frequency communication unit 32 and this Eco-drive display unit 33, and can Be Controlled key 362 drive and light warning lamp 351. And this microprocessor 361 can change between a lock-out state and a released state; When it is positioned at lock-out state; This microprocessor 361 can't drive by Be Controlled key 362, therefore can't carry out the switching of warning lamp 351, has only when it is in released state; Can be lighted or change warning lamp 351 by driving, and can the coloured light data of the warning lamp of being lighted 351 be stored in this storage element 38.

- 46 Although this translation is not perfect, it is clear enough that in one mode (the released state) the control keys 362 can be used to switch the coloured warning lamps 351, although this does not change the colour of the screen.
- 47 As this document was not included in the pre-Hearing report or discussed at the Hearing, Ms. Buckland was given the opportunity to make observations on its relevance to her invention before this decision was issued. In her response dated 5 December 2018 Ms. Buckland agreed that it shows a patient tagging device which has a manual colour changing function, but commented that this is not a vital signs monitoring system.
- 48 I partially agree with this argument, but as I have already concluded that the colour changing function is a collocated feature which has no interrelationship with the other features of claim 1 (e.g. the sensors which allow vital signs monitoring), this does not affect the relevance of CN102446285 to the feature of the colour changing pin.
- 49 Further, it is considered that adapting the strap of CN102446285 such that the screen changes colour instead of a separate light would be an obvious modification for a skilled person to make, and so the feature of a 'colour changing pin' is not considered to be inventive over CN102446285.
- 50 Although no disclosure has been found of a tablet including a CD slot, this is not considered to be an inventive feature. It is common to use a wide range of data storage means for different computing devices depending on the application. Although there may be a prejudice against including a CD slot in a tablet because of size/weight constraints, there is no technical reason why one could not be included, and on that basis this feature is considered to be obvious in view of the skilled person's common general knowledge.
- 51 In conclusion, all identified parts of the collocation defined in claim 1 have been found to be known or obvious, and so it follows that claim 1 is not inventive as required by section 1(1)(b) and section 3 of the Act.

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- 52 Undoubtedly claim 1 is a collocation of a number of inventive concepts due to many of the defined features carrying out their own usual function irrespective of the other defined features. However, at the Hearing Ms Buckland made clear that an important element of the invention is the cooperation of the nametag (wrist strap), clipboard and master board, and it is agreed that this combination of hardware is not in itself a collocation, as each part has a synergy with the other component parts.
- 53 In her pre-hearing report, the Examiner indicated that this combination of hardware is standard practice in the art, citing a fitness tracker connected to an app on a mobile

phone or tablet, with the data also being shared (presumably via a server) for data analysis. Indeed, GB2430118 discloses a strap and pad which communicate with a 'main database'.

- 54 I do not disagree with the Examiner's assessment of what is standard practice in the art. However, I do not consider that the master board of the invention is akin to a standard server or database. Claim 1 is clear in that the master board is an interactive device, and is essentially a larger version of the clipboard. Further, claim 1 is also clear in that the master board houses the multiple wireless ultrasound and infrared scanners. This feature is further linked to the clipboard as it is clear from the description of the application that the scanners are intended to be used with the clipboard (i.e. the scan image is provided on the clipboard). In addition, at the Hearing Ms Buckland explained that the reason for housing the scanners on the mother board as opposed to the clipboard is for physical security and such that each clipboard does not require its own scanner(s). In my mind this clearly links the clipboard and mother board in a way other than purely data communication between the two.
- 55 I therefore consider that there is synergy in the combination of a name tag, clipboard and mother board, with wireless scanners being housed on the motherboard as defined in claim 1. This has not been found to be known or obvious, and so claim 1 (despite being a collocation) has not been shown to be a collocation of known or obvious features.

Sufficiency

The law

- 56 The law relating to sufficiency is set out in section 14(3) of the Act, which states:

14(3) The specification of an application shall disclose the invention in a manner which is clear enough and complete enough for the invention to be performed by a person skilled in the art.

- 57 The purpose of section 14(3) of the Act is to prevent an applicant laying claim to products or processes which the teaching of the patent application does not enable the skilled addressee to perform. In other words, does the patent application provide enough information for a person with a reasonable knowledge and understanding of the technical area described in the application to be able to carry out the invention?

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- 58 In his pre-hearing report, the Examiner objected to the application not sufficiently disclosing the invention such that a suitably skilled person would be able to put it into practice - i.e. manufacture a working version of the strap and tablet such that they communicate to perform all of the functions described. In particular, the Examiner identified the following features of the invention which he considers that the skilled person would not be able to implement based on the disclosure of the application:
- (a) The operation of the wireless ultrasound scanner
 - (b) The indoor positioning app.

- (c) The strap being linked to the nurses' station until the patient enters a cubicle, at which point it links to the tablet.
- (d) The strap communicating solely with a database
- (e) The tablet working continuously behind a blank screen until it is retina activated.

59 At this point it is important to remember that the requirement of sufficiency is concerned with the invention as defined in the claims, and so it is the claimed features (whether that be in claim 1, or any subsequent claims) that must be sufficiently disclosed.

60 Based on the amended claims filed on 4 May 2015, the features identified as (a) and (b) above can be found in claim 1, with further reference found in claims 33 and 31 respectively. The features identified as (c) and (e) can be found in claims 15 and 39 respectively. I can see no specific reference in any of the application to feature (d) - the strap communicating solely with a database, but claim 2 suggests that the strap could communicate directly with a database for the purpose of children's services, and this is the feature that I will consider here.

61 In deciding whether a feature is sufficiently disclosed there are two important factors to consider:

(i) The invention must be sufficiently disclosed such that a suitably skilled person would be able to put it into practice. That skilled person must be assumed to be in possession of the common general knowledge in the art, and the necessary skill and expertise to apply that knowledge. He is the man of average skill and intelligence, but is not expected to be able to exercise any invention. In some arts he may have a degree, in others he will be a man with practical experience only. Further, in circumstances where the art encompasses more than one technology, the notional skilled addressee will be in possession of those technologies which may mean that he will have the knowledge of more than one person - i.e. will be considered to constitute a team of people suitably skilled in their own technologies. The skilled person (or team of people) is also trying to carry out the invention and achieve success rather than look for flaws in the description.

(ii) Whether the invention (or a feature thereof) is sufficiently disclosed is judged on the skill and knowledge that the skilled person (or team) would have had on the earliest date of the application - i.e. its filing date, or any valid earlier priority date.

62 In this instance I consider the relevant skilled person (or team) to have skills and common general knowledge in the field of patient monitoring systems, including both hardware and software, and would at least have access to some specialist computing expertise - including in particular communication systems.

63 The application has a filing date of 12 January 2015, and an earliest claimed priority date of 11 September 2014. The actual priority date of the claimed features will depend on their earliest actual disclosure date, but in any case these dates are only four months apart, so I see that this is unlikely to be of any consequence.

Wireless ultrasound scanner

- 64 There is no technical disclosure in the application regarding how a wireless ultrasound scanner would be implemented. It is true that the existence of wireless ultrasound scanners would have been known to the skilled person, with Siemens in particular unveiling a seemingly breakthrough product in November 2012. However, this was a standalone ultrasound system comprising of a wireless scanner which communicates with a tablet type screen dedicated purely to the ultrasound system. It would appear that wireless ultrasound scanners which can communicate with a more generic tablet or smartphone were not available or commonly known about until after January 2015. It is therefore considered that the skilled person would be able to provide a wireless ultrasound scanner that communicates with a standalone tablet-type computer screen, but this does not necessarily means that he would be able to successfully and reliably integrate this function into a multipurpose tablet capable of at least all of the functions defined in claim 1. Successfully and reliably integrating a myriad of different features and functions into a single device would undoubtedly be a complex and onerous task. Although such a task may not necessarily be impossible, I believe that it would be beyond the ordinary skill of someone working in the field of patient monitoring systems, even with access to some specialist computing expertise.

Indoor positioning app

- 65 This feature is intended to provide a location of a patient wearing the strap when they are within a building, such as a hospital, care home of vets, where GPS will not work. The only technical disclosure in the application of this feature is that it works using WIFI. However, the use of WIFI signal strength to determine a separation between a WIFI transmitter and receiver would have been well known even in 2014, it also being well known to use the signal strength received from multiple transmitters in order to triangulate the position of the receiver, such as within a building with a WIFI transmitter network. It is considered that the skilled person would have had access to this knowledge, and would not face any undue burden in implementing the technology into a patient wrist strap and tablet system such that a building's (e.g. hospital's) existing WIFI network (which was common even in 2014) could be used to determine the position of a patient wearing the strap. I therefore consider that this feature is sufficiently disclosed.

Strap being linked to the nurses' station until the patient enters a cubicle, at which point it links to the tablet

- 66 There is no technical disclosure of how this function would be implemented. As with the wireless ultrasound scanner, it is not that implementation of this function would be impossible. However, there is absolutely no disclosure of how it might be done, and I consider that the skilled person would certainly face an extremely undue burden in trying to do this. Therefore, this feature is undoubtedly insufficiently disclosed.

Strap communicating directly with a database

- 67 From the indoor positioning app feature, it is clear that the strap must be WIFI enabled. Therefore, I do not see that there would be any difficulty in making the strap

communicate directly with a remote server via WIFI and the internet. I therefore consider that this feature is sufficiently disclosed.

Tablet working continuously behind a blank screen until it is retina activated

- 68 Again, there is no technical disclosure of how this function would be implemented. There are two distinct parts to this feature - (i) the ability of the tablet to work behind a blank screen, and (ii) the screen being retina activated. It is common for tablets to process data even when its screen is blank, there being no intrinsic reason why the two need to be linked. I therefore consider that part (i) would present no problem for the skilled person. However, retina scanning (unlike iris scanning) is a complex procedure which requires a specific retinal scanning device rather than a standard digital camera. I consider that integrating this with all of the other required functions and input devices would not be a simple task, and would place an undue burden on the skilled person. I therefore consider that this feature is not sufficiently disclosed.

Other features, and invention as a whole

- 69 Besides the features specifically discussed above, the claims read as a wish list of features which it would be desirable to provide. In particular, claim 1 includes many disparate features which have been brought together in one system. Whilst the inclusion of many disparate features in a purely mechanical system might be readily achievable (such as in a penknife or other multi-tool), this would not necessarily be the case for a computing and communications system such as the present invention. Integrating many different pieces of hardware and software such that they all operate as intended (and sufficiently reliably) would no doubt be a complex task.
- 70 The disclosure of the application contains very little on how this integration could be achieved, instead it focuses on the functionality and intended uses of the invention. At the Hearing, Ms Buckland indicated that she believed that the skilled person would simply know how to put the invention into practice without any difficulty. However, I cannot agree with this. It may be true that some features could be integrated without much difficulty, but I do not think this can be said for all of the features defined in claim 1, let alone all of those defined in claims 2-39 as well. I therefore consider that the claimed invention is insufficiently disclosed by the application as a whole.
- 71 Whilst it can be possible to overcome sufficiency by restricting the claims so as not to claim insufficiently disclosed features, I do not consider that that would be possible for this application. Restricting the claims only to sufficiently disclosed features would undoubtedly omit from the claims what are clearly intended to be essential features of the invention, thus unacceptably broadening its scope.

Summary

72 GB1500399.9:- Vital Pad +

- 73 Whilst it has been found that the invention defined by claim 1 is not obvious, it is a collocation of known or obvious features, and as such is not inventive. Further, it has been found that the claimed invention is not sufficiently disclosed.

74 Whilst amending claim 1 such that it is not a collocation may be possible, I do not consider that any acceptable amendment could overcome the sufficiency issue, and so I see no saving amendment that could be made. I therefore refuse the application under s.18(3) of the Act.

GB1604348.1:- Physicians Eye

75 It has been found that there is no added matter, and that the invention defined by claim 1 is not obvious.

76 Further, whilst claim 1 does have an element of collocated features, I consider that the hardware system of *a nametag (wrist strap), clipboard and master board, which houses multiple wireless ultrasound and infrared scanners*, is not in itself a collocation as each part has an effect on the functioning of the other parts, and this has not been shown to be known or obvious.

77 I can therefore see no basis to refuse the application at this stage, and remit it to the examiner for further processing. I would suggest that the examiner conducts a full search for the non-collocated features identified above in order to assess whether the invention is indeed inventive or not.

78 I would also urge Ms Buckland to take heed of any further objections raised by the examiner, and to make appropriate and meaningful amendments in response. Throughout the Hearing, Ms Buckland agreed that significant amendment of the claims was necessary, and appeared to be suggesting that she would be willing to do that (possibly employing the services of a patent attorney) once it has been agreed that a patent can be granted. Of course, this is not how the patent examining process works. Amendments to overcome the objections must be made before the grant of a patent can be agreed. Failure to do this will inevitably lead to a further Hearing in the future.

Appeal

79 Any appeal must be lodged within 28 days after the date of this decision.

Peter Mason

Deputy Director, acting for the Comptroller