

Protecting software-implemented medical inventions

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- **Really** brief overview of very complex area of legal practice
- The UK & European Positions:
 - Statutory exclusions & case law
 - A couple of examples of granted EP patents for medically oriented software
- The US position
- Reasons to consider patenting (besides litigation!)

Criteria for patentability

- Your invention must be:
 - Novel
new – not 'disclosed'
 - Inventive
not an obvious modification
 - Outside the 'excluded categories'
statutory law says you can't have a patent for certain types of invention



Patents Act 1977 - Section 1(2)



It is hereby declared that the following (among other things) are not inventions for the purposes of this Act, that is to say, anything which consists of -

- (a) a discovery, scientific theory or mathematical method;
- (b) a literary, dramatic, musical or artistic work or any other aesthetic creation whatsoever;
- (c) a scheme, rule or method for performing a mental act, playing a game or **doing business, or a program for a computer**;
- (d) the presentation of information;

but the foregoing provision shall prevent anything from being treated as an invention for the purposes of this Act only to the extent that a patent or application for a patent relates to that thing **as such**.

What does 'as such' mean?

- Interpreted in case law
 - technical process carried out under the control of a computer
 - More than just a 'better program'
- **Technical** contribution/effect
- Determined on case by case basis
- Patent granted if software solves a technical problem in a novel and non-obvious manner



Some 'signposts'

1. Software has a technical effect on a process carried on outside the computer
2. It operates at the level of the architecture of the computer - the effect is produced irrespective of the data being processed or the application being run
3. It causes the computer to operate in a new way
4. It results in a better computer in the sense of running more efficiently and effectively as a computer
5. The perceived problem is overcome by the claimed invention as opposed to merely being circumvented

Abstract of (granted) EP2248545

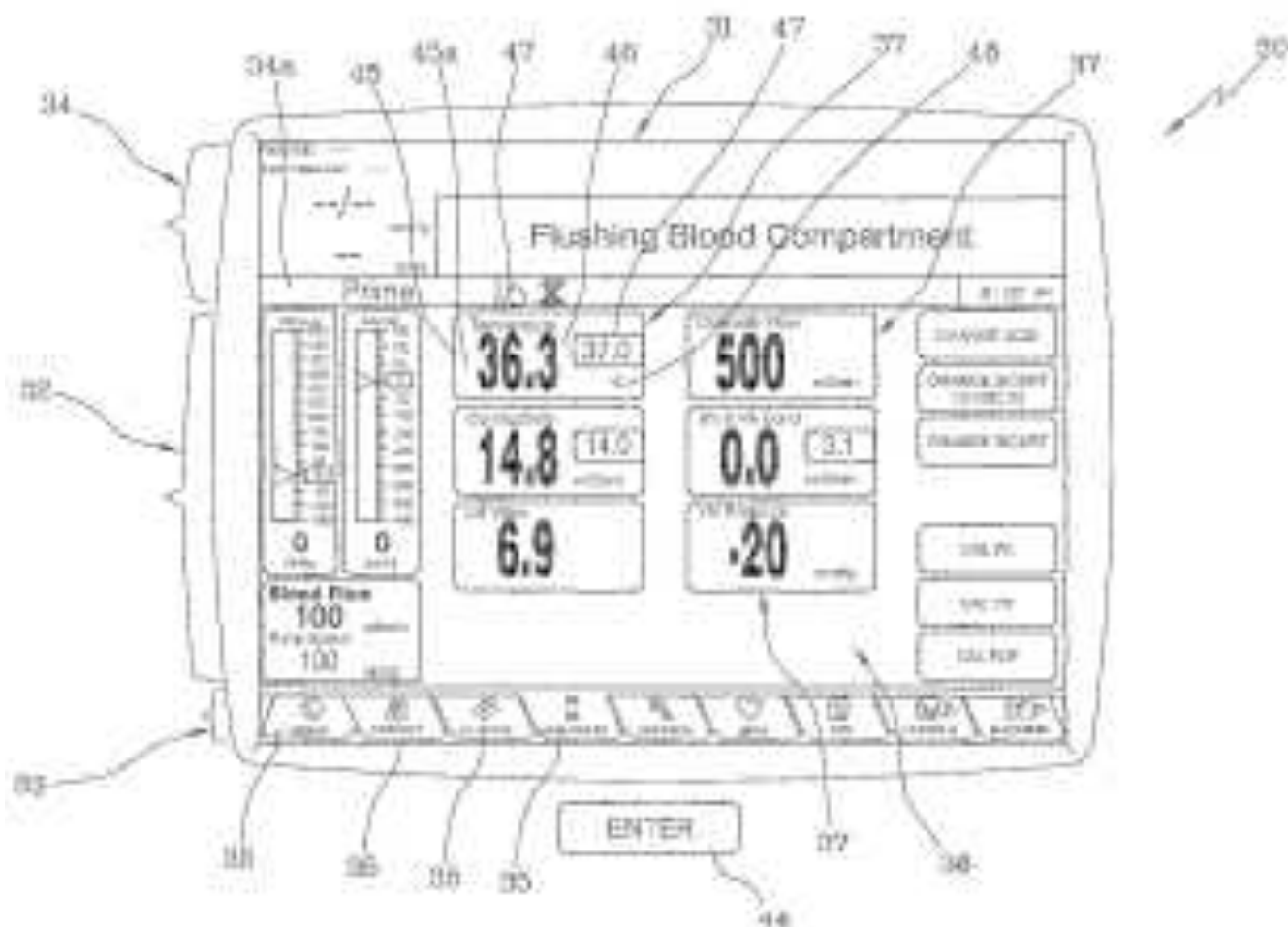


A medical apparatus comprises:

a user interface, a number of sensors and a control system programmed for displaying on the user interface screen a number of indicia, each relating to a corresponding parameter and comprising an indicium border delimiting an indicium selection area;

the control system allows selection of an indicium for identifying the parameter a user intends to modify, allows setting of a new set value for the selected parameter;

the control system also receives from the sensors a measure of the actual value for the parameter and displays on the indicium selection area of the indicium both the actual value and the set value for the same parameter



Claim 1 of (granted) EP0970722



A programmer system for use with an implanted medical device, the device having software control and means for receiving and storing control software for changing device functionality, said programmer system comprising:
memory containing device function routines and manual data which includes a manual for said device, said manual data having manual portions corresponding to said device function routines;
display means for displaying any portion of said manual;
downloading means for carrying out the operation of downloading a said function routine to said device, and
selection means for selecting the function routine to be downloaded; and
manual means for providing to said display means the manual portion corresponding to said selected function routine in response to a said selection.



The US Position



- 35 U.S.C. § 101: A patent can be obtained for any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof
- Exceptions:
 - laws of nature
 - physical phenomena
 - **abstract ideas**
- The 'machine-or-transformation' test: A process is patentable **only** if
 - It is tied to a particular machine or apparatus; **or**
 - It transforms a particular article into a different state or thing

Things just got tougher in the US...



- June 2014:

US Supreme Court invalidates Alice Corp.'s patents for computerized method of reducing risk in financial trading

an abstract idea or other "building blocks of human ingenuity" do not become patentable simply by being implemented on a computer

- Waiting to see how matters unfold going forward

But why would I bother?



- ‘Keep off the grass’ sign
- Adds value to your business
 - can license, mortgage, sell it etc.
- Copyright will not protect an idea (only source code)
- Potential investors
- ‘Patent box’ scheme (since April 2013)
 - corporation tax reduced to 10% for worldwide profits flowing from patented technology developed in UK

Thank you



- [Email: cej@udl.co.uk](mailto:cej@udl.co.uk)
- Questions?