European Software Patent Horror Gallery

Here we are constructing a free database of (illegally granted) European software patents. By law, patent informations are public. But the patent offices are still not serving their information in a really useful form.

Our database is built on data which can be downloaded from http://www.espacenet.org. Unfortunately some of the claims published there are old versions which may have been narrowed down by examinations or further proceedings meanwhile. In most cases the text versions published by the EPO are identical to the new versions, but this is not always the case, and when it isn't, it requires a lot of manual labor or can even be impossible to find the currently valid versions. Even the example patents below have not yet all been checked. We are hurrying to do this. Please help us!

1. Database
2. Examples
3. How to read patent descriptions

1. Database

EPO software patent overview

2. Examples

We picked the following examples at first reading through the above database. They were almost randomly chosen and represent only a tiny fraction that allows people to recognise the dangers. We beg you to browse further give us more hints, to be discussed in one of the mailing lists.

The EPO has granted patents on the following programming tasks, see also our Press Release. The translation to English will be completed by monday morning, Nov 20.

<table>
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<tr>
<th>Description</th>
<th>Main Claim</th>
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<tr>
<td>automatic medical</td>
<td>A system for automatically analyzing a medical</td>
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**diagnosis:** The main claim covers all medical diagnoses that can be calculated automatically based on input of image and text data, regardless of what the calculation is based on. Further claims and subsequent patents allow Shibaura to own specific diagnosis problems, provided that a computer is used.

**controlling one computer by another:** This covers systems like RPC, Telnet, client-server computing or even the connection between a keyboard-cpu and a computer.

**COMPUTER VIRUS TRAP:** Creating an emulated computer environment and testing a data stream within that environment before accepting it into the real computer environment is a useful and difficult thing to do. Anyone who endeavors to do it will have to beg for a license from "Quantum Leap Technologies".

**dynamic pricing:** A mechanism for specifying fees for an online image using a predetermined computer-aided diagnosis algorithm, characterized by comprising: means for inputting a medical image and attribute data of the medical image; means for determining, based on the attribute data, whether or not the medical image is adapted to the predetermined computer-aided diagnosis algorithm; means for analyzing the medical image using the predetermined computer-aided diagnosis algorithm in accordance with a result of a determination of said determining means; and means for displaying an analysis result of said analyzing means.

**Apparatus for control of a first computer (231) system responsive to callable programs (205) by a second computer system (233) connected by message transport means (210, 213) to the first computer system, characterized by 1. message providing means (227) in the second computer system for providing a call message (215) specifying a callable program in the first computer system to the message transport means, and 2. message interpretation means (211) in the first computer system for receiving the call message from the message transport means and calling the callable program specified in the call message.

**A computer virus trapping device comprising:** link adapter means connected to a source of data input for converting external protocols into a data format understood by said trapping device; emulation means connected to said link adapter means for accepting said data stream from said link adapter means; said emulation means providing an environment isolated from a protected computer system that simulates the architecture of said protected computer system whereby a computer virus is coaxed into performing its intended activity; and detection means for monitoring said emulation means and determining when said computer virus either has performed or is performing its said intended activity.
This means that anyone who replaces a price tag with a function and allows this function to be specified by an editor is infringing on a patent in Europe. The following dependent claims are not less awesome.

**Public key/signature cryptosystem with enhanced digital signature certification.** In a system like PGP/GPG, add some extra authentication info into the signature and you will be infringing on this patent.

**Multitasking:** A separate is inserted between various applications and the terminal, so that the application and the user can communicate independently with this interface. This makes it possible to let processes run in the background.

**Method and apparatus for path name format conversion:** Separation of pathnames into their components. Some subclaims refer to the normal procedure necessary for converting

In a communications system having a plurality of terminal devices (Terminals A to N) coupled to an insecure communications channel (12) over which users of said terminal devices may exchange private messages, each of said user's having a public key (30) and an associated private key (32), an improved method of digitally signing and certifying a message to be transmitted characterized by the steps of: formulating at least a portion of a digital message (20); digitally signing said message (40); and including within said message an authorizing certificate (28, 116) which specifies the authority which has been granted to the signer of said message.

A method encoded in the form of binary program instructions for converting an ASCII path name having a prefix and a file name to a parsed path name structure, said method implemented in conjunction with a computing system, said computing system having a random access memory (4) for storing the program instructions, for providing buffers in which to store data to be manipulated in accordance with the program instructions, as well as intermediate and final program results, and a central processing unit.
Windows95 filenames to WindowsNT filenames.

(CPU) (3) for manipulating the data in accordance with the program instructions in order to achieve the intermediate and final program results, said method comprising the steps of: (a) providing for assigning a buffer (21, 31) within the random access memory in which the parsed path name structure will be assembled; (b) providing for converting at least a portion of the ASCII path name to an unparsed string (22A, 32A) of corresponding unicode values, and sequentially writing said unparsed string, character by character, into said buffer (21, 31); and (c) providing for converting the unparsed string to the parsed path name structure (22B, 32B).

mediation between terminal and several computers: The main claim seems to cover almost any form of interfacing between a terminal and multiple hosts that run on independent systems. The subclaims narrow it down to a specific application, but still don't teach a solution but rather serve to occupy the problem in specific contexts.

A method for operating an interface processor to provide access to applications running on a plurality of host processors, each said host processor communicating with said interface processor by providing screens to said interface processor, comprising the steps of: (a) establishing at least one virtual terminal session with each said host processor and initializing said applications running on said host processor to ready them for further commands; (b) responding to a user request that requires a process to be performed by an application, by accessing a virtual terminal session with a host processor on which said application is running, entering user data in a stored screen from said application and transmitting said data to said host processor, whereby said host processor immediately processes said data; and (c) receiving a screen from said host processor containing data for said user, and transmitting said data to said user, whereby said interface processor enables a plurality of host processors to rapidly respond to user-supplied data without requiring modification of host processor-controlling software.

Creating dynamic webpages by invoking a script: This seems to cover any webserver that processes HTML forms and invokes a program via a common gateway interface, such that this program returns a webpage.

A service agent for fulfilling requests of a web browser client coupled to a network; comprising: a control program agent tangibly embodying a program of instructions executable by a supporting machine environment for performing method steps for receiving a request initiated at said web browser client and fulfilling the request by providing a result, said method steps comprising: displaying an HTML document to said web browser; invoking a control program agent; receiving data entered by the user from the HTML document and passing said user entered data to said control program agent upon
<table>
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<tr>
<th>English</th>
<th>German</th>
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<tr>
<td><strong>Invocation as input parameters to said control program agent that were returned from said HTML document; using an API set for invoking executable command files and programs accessible via a associated command file object.</strong></td>
<td><strong>Verfahren zur virtuellen Verkürzung der Übertragungszeit beim bidirektionalen Datenaustausch zwischen Computer- und/oder Steuersystemen, wobei ein vorhandenes Echtzeit-Datenbild über eine Eingabe verändert und vorzugsweise sichtbar gemacht wird, dadurch gekennzeichnet, dass für den Bereich der Eingabe, insbesondere während der Übertragungszeit, von dem Echtzeit-Datenbild ein Simulierbild hergestellt und Simulierbild die Veränderung zeitgleich mit der Eingabe vorgenommen wird.</strong></td>
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<td><strong>Preliminary local echo:</strong> Send a preliminary message back to the screen, if due to a slow network connection the program in the background can't send the final message quickly enough.</td>
<td><strong>Intuitive network configuration:</strong> Represent the nodes in the network and their relations in a graphical manner, e.g. as circles and arrows, editable by drag &amp; drop, and generate configuration files from the result. This covers all user-friendly network administration tools that are yet to be written.</td>
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<td><strong>A computer system for defining the configuration of a network, comprising: means for graphically representing a first network of three or more nodes by defining first network objects for the nodes; means for graphically defining connections to relate the first network objects; and means for automatically generating parameters to configure a physical network as defined by the network objects and connections.</strong></td>
<td><strong>Computer system for data management including at least the management of data relating to the trading of warrants, comprising a data processing system (1), an input unit (2), a display unit (3) and a data input (5), wherein the display unit (3) displays a first mask having a format allowing the input of a request for specific data by the input unit (2), the data input (5) is read if the request is input by the input unit (2), the display unit (3) displays a second mask including the requested data, and the data processing system (1) holds the requested data for a predetermined time period Tset and performs a transaction relating to the specific data, if a transaction request is input by the input unit (2) during a predetermined time period Tset.</strong></td>
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<td><strong>Flash File System:</strong></td>
<td><strong>A memory management method for a memory in</strong></td>
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This patent seems to make it nearly impossible to develop any non-proprietary software for an important section of the embedded devices market. It claims the logical consequences of the fact that in flash memory blocks data can only be stored and replaced in blocks of 64k or similar. And it is not the only EPO-granted stumbling block in this area.

which data can be written only in unwritten physical memory locations and in which a zone of contiguous memory locations can be simultaneously erased, comprising the steps of: organizing the memory into a plurality of units; organizing each unit into a plurality of blocks, each of said blocks made up of a plurality of contiguous physical memory locations; establishing an allocation map for each unit which indicates the status of each block in a unit as written, unwritten or deleted; establishing a virtual map to map virtual addresses to physical addresses; in writing data to said memory at a virtual address: (a) mapping said virtual address to a physical block address using said virtual map; (b) examining said allocation map for said unit to which said virtual address has been mapped in step (a) to determine the status of a block at said physical block address as written, unwritten or deleted; (c) if said block at said physical block address is in written or deleted status: (1) examining said allocation map for at least one of said units to identify an unwritten block address; (2) writing said data into said memory to said unwritten block address; (3) changing said allocation map for a block in a unit in which said data have been written in step (c)(2) to indicate as written said previously unwritten block address where said data have been written; (4) changing said virtual map to map virtual addresses to physical addresses within a unit so that said virtual map maps said virtual address to the physical address of said previously unwritten block in which said data have been written in step (c)(2); establishing a transfer unit in said memory in which all blocks are in unwritten status, said transfer unit including a transfer unit allocation map; periodically identifying a selected unit, other than said transfer unit, to be erased; reading each written block in said selected unit; writing each written block in said selected unit into said transfer unit; updating said transfer unit allocation map to indicate as written the status of blocks that have been written in the just previous writing step; erasing said selected unit; updating said virtual map to reflect the above-described movement of said written blocks.

stateless shopping cart: collect buyable items in a list and buy all of them at once.

A computer-executable process, embedded in a computer-useable medium, for supplying items on a network (46), the network having at least one computer-server (20) for communicating
With users employing a browser program on a terminal/computer (35) at a location remote from said computer-server, said embedded process comprising the steps of: receiving (152), at the computer-server, a transmitted command from said browser program for a shopping page (40); in response to said transmitted command, generating (154) a shopping page file and transmitting (156) the shopping page file to said browser program; receiving (168), at the computer-server, at least one user selected item from the shopping page received (158) by the browser program; creating (174) a list at the computer server; at the computer server, adding (178) to the list each user selected item received by said receiving step; returning (184) from the computer server the list of items in an entry of a shopping page file to said browser program; and continuing user selection (200), receiving (168) data strings, adding (178) items to said list and returning (184) said list until termination by the user.

**Data reduction in mobile TCP communication:**
This lets IBM become the owner of the problem of reducing data by multiplexing. Any mobile communication standard for TCP communication will have a hard time working around that.

A method of reducing the data transmitted over a communication link from a first application resident in a first computer and to a second application resident in a second computer wherein the data is transmitted over an external communication link from the first computer to the second computer utilizing the TCP communication protocol, the method comprising: establishing a first virtual socket in the first computer in response to each connection request by the first application for receiving request data originated by the first application; establishing a first real socket in the first computer and a second real socket in the second computer to connect the first computer to the second computer over the external communication link establishing in the second computer a second virtual socket for each connection request by the first application wherein the second virtual socket corresponds to a first virtual socket established in the first computer in response to a connection request by the first application; multiplexing request data associated with a first virtual socket onto the first real socket; transmitting the multiplexed request data over the external communication link utilizing the TCP protocol to the second real socket; receiving the multiplexed request data from the external communication link; demultiplexing the request data received by the second real socket from the external
<p>| <strong>Database retrieval system for responding to natural language queries with corresponding tables</strong> | An information retrieval system for retrieving information from a database, comprising: a parser for parsing a natural language query into its constituent phrases to produce a syntax analysis result; virtual table for converting phrases of the natural language query to retrieval keys possessed by the database, said virtual table accounting for particles that modify the phrases; a collating unit for preparing a database retrieval formula from the syntax analysis result by selecting a virtual table that is used to convert the phrases of the natural language query to keys possessed by the database; and a retrieval execution unit for retrieving data from the database on the basis of said database retrieval formula. |
| <strong>Visualising a Process</strong> | A method for programming a computer system including means for displaying images to control at least one of a virtual instrument and an instrument, the method comprising the steps of: displaying on the screen at least one first function-icon that references at least one first control means for controlling at least one first function; displaying on the screen at least one iteration-icon that references iteration control means for controlling multiple iterations of data flow; displaying on the screen at least one first input variable-icon that references at least one first input variable; displaying on the screen at least one first output variable-icon that references at least one first output variable and assembling on the screen a first acyclic data flow diagram including the at least one first function-icon and the at least one iteration-icon and the at least one first input variable-icon and the at least one first output variable-icon, such that the diagram displays a first procedure for producing at least one value for the at least one first output variable-icon from at least one value for the at least one first input variable-icon, and such that the at least one iteration-icon in the diagram indicates multiple iterations of the at least one first function. |</p>
<table>
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<tr>
<th>Topic</th>
<th>Description</th>
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<tr>
<td>Cache with at least two fill sizes</td>
<td>Distinguish between used and unused blocks when refilling faulty blocks in cache, so as to avoid spending unnecessary time on rewriting already used blocks. There are hundreds of EPO patents of this type. Try searching the database for words like &quot;cache&quot; or &quot;memory&quot;.</td>
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<td>A method of sending information to a cache in a computer, the method comprising the steps of: searching the cache for the requested information; generating a miss signal when the requested information is not found; examining a valid bit of a data block in said cache where requested information should be located, when said miss signal is generated; filling said cache with N data blocks during a specified time interval if the valid bit is not on, said N data blocks including a data block containing said requested information; and filling said cache with P data blocks at one time if the valid bit is on, where P is less than N, said P blocks including a data block containing said requested information.</td>
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<td>Compression requests from a client to a server</td>
<td>An application specifies a compression scheme for data communication, which is then used by an independent communication server, such as a MIME-conformant mail system.</td>
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<td>A computer workstation for connection into a network, said workstation including application means and a communications subsystem, whereby messages generated by the application means are passed to the communications subsystem for transmission onto the network, characterised in that: the application means includes means for adding information to the message concerning how the message should be compressed; and the communications subsystem includes means responsive to said information for processing the message accordingly.</td>
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<tr>
<td>Select cooking recipes to generate a list of items to buy</td>
<td>Calculate lists of things to buy with buying instructions, based on cooking recipes specified by a user. The &quot;technical contribution&quot; lies in the fact that a printer and a monitor are used.</td>
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<td>Interactive information selection apparatus, comprising: memory means in which all necessary information relating to at least one dish consisting of a number of components is or can be stored spread over a number of hierarchical levels; first display means for displaying in each case a list of options corresponding with one level, one of which options at a time can be selected by a user; selection means which can be operated by a user and which are adapted, after a start instruction and on the basis of menu control, to address that part of the memory containing partial information relating to the selected option; and second display means for displaying all relevant information present in the memory corresponding with all selected options.</td>
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<td>Interactive language learning</td>
<td>An interactive language learning system comprising: storing means for storing a digitized speech version of a passage of language and for also storing a digital data textual version of said</td>
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<tr>
<td>Interactive language learning</td>
<td>This covers all digital language learning systems that</td>
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allow a user to compare his pronunciation of a selected piece of text to the right pronunciation.

same passage; a display for displaying text corresponding to said passage; selecting means operatively connected to said display and to said storing means and operable by a user for selecting a portion of said passage, and for causing the portion of said stored digital data textual version corresponding to said selected passage portion to be displayed as text on said display; and speech processing means for: selecting the portion of said stored digitized speech version corresponding to said selected portion of said passage, converting said selected digitized speech version portion to audio signals for use in generating speech sounds, converting audio signals representing user speech into digitized speech signals representing said user speech, and subsequently reconverting said digitized speech signals representing said user speech to audio signals for use in generating further speech sounds so as to permit said user to listen to and compare his own speech with a spoken version of said passage corresponding to said stored digitized speech version.

computer based testing: use a computer for testing pupils. The main claim covers the basic procedure, the others just specify useful things to be done. The "technical contributions" consists in the teaching that a computer can be used to do these things more efficiently.

A computer based testing system comprising: a test development system for creating a computerized test having a number of questions to be answered by an examinee, a plurality of related test screens containing messages and directions providing information for the examinee, and a computerized test script defining rules for determining a sequence of questions and related test screens to be presented; a workstation operable to present the questions to at least one said examinee and operable to accept examinee responses to the questions so presented; and a test delivery system operatively coupled to both said test development system and said workstation for delivering said computerized test by presenting the questions and related test screens according to the rules defined by the test script to each said examinee on said workstation.

Global user interface: A help system in which commands are context specific. This patent consists of only one claim, short and broad. The description behind it refers to a command environment for the

In a computing system having at least one window, a method for defining an input to the computer system comprising the steps of: associating the window with a context; accepting a string of text selected from anywhere in the window; and providing the string of text together with the context as the input.
3. How to read patent descriptions

A patent description consists in

- claims
- description

The claims say what you are not allowed to do. Each claim defines one class of prohibited objects. The description helps to interpret the meaning of the claims. It is supposed to provide sufficient instructions to enable the person skilled in the art to reimplement the "invention" without engaging in further inventive activity. However, EPO software patent descriptions generally fail to provide a reference implementation, and the hard and part is usually left to the programmer. Thus even from the point of view of enablement doubt could be casted on the validity of most EPO software patents.

Patent descriptions and claims use a lot of strange talk about "allocation a block of space for a variable in a memory device" etc. This may just serve to make the "invention" look "technical", but also to prepare lines of retreat for possible litigation. In any case, a less legally interested reader will have to learn to treat it as noise.

suggested reading

- Richard Stallman -- The Anatomy of a Trivial Patent (This article does a good job at showing how trivial things are made to sound complicated in patent descriptions. However it may not be of much help in appreciating why this is so. Patents are after all not meant to be good textbooks but rather to provide an excruciatingly accurate definition of what your are not allowed to do.)
- Dr. Swen Kiesewetter-Köbinger: Über die Patentprüfung von Programmen für Datenverarbeitungsanlagen (Problems and inconsistencies of software patenting from the perspective of a former programmer and present-day examiner at the German Patent and Trademark Office -- a very lucid article that shows why software patents are what they are and mercilessly debunks a whole network of fallacious arguments of those who have been pushing software patents in Germany. translator wanted!)

http://swpat.ffdii.org/vreji/pikta/indexen.html