This document includes some recent decisions of the EPO in 2013 with regards to software related inventions and shows relevant extracts from the respective decisions.

T 2464/09 (Managing workflow/SCRIBES) of 20.2.2013
AUTOMATIC ELECTRONIC DOCUMENT PROCESSOR SYSTEM

Inventive step - (no)

Applicant name: A:/Scribes Corporation
Application number: 98911618.1
IPC Class: G06F 17/60

http://www.epo.org/law-practice/case-law-appeals/pdf/t092464eu1.pdf

The invention relates to a method of allocating work to workers. A manager receives a job specification from a client and uses it to generate a "job packet" which he passes on to another manager. The second manager maintains data, including schedules, about "scribes" and forwards the job packet, or part of it, to particular scribes on the basis of their schedules.

Claim 1 according to the main request read as follows.

A system for automatically managing workflow, comprising:

a first computer arranged to receive an originating job request and job instructions from an authorized user, and to generate a job packet associated with-a digital file, wherein the digital file represents job input from the authorized user, and

a second computer for processing said job packet;

characterised in that

the first computer is arranged to interpret said job instructions to provide in the job packet a job record that includes a set of computer-readable job processing requirements; and

the second computer is arranged to read and analyze the job processing requirements, to maintain respective scribe data for each of a plurality of scribes, the scribe data including a respective schedule data associated with each scribe and indicating when the respective scribe is to be available to work, and to automatically forward job step data to a remote computer associated with a selected scribe based on the corresponding schedule data.

Peter Bittner – European Patent Attorney

In the Board's view there is **nothing technical in the underlying method**. It would have been **obvious** to the skilled person, seeking to **automate that method**, to use a network of computers. Once it had been decided to use such a network, it would have followed directly that the "job packet" would be associated with a digital file that the data would be maintained on the second computer, which takes the role of the second manager, and that forwarding would be automatic.

The appellant has argued that account must be taken of the state of technology in 1998, without knowledge of the developments which have taken place since. The Board accepts that, but notes that the **use of a network of computers in similar systems was known in 1998**. D1 provides an example. The argument above relies only on the obviousness of using a network of computers, and not on any technical details beyond the abilities to store, process and communicate data.

The Board concludes that the system defined in claim 1 does **not involve an inventive step** (Article 56 EPC 1973) and, therefore, that the main request cannot be allowed.

T 1987/10 (Automotive shop service machine/SNAP-ON EQUIPMENT) of 25.1.2013

Method and apparatus for updating of software and/or collecting of operational data in a machine unit

Inventive step - (yes) after amendment

Applicant name: Snap-on Equipment Srl a unico socio
Application number: 06016557.8
IPC Class: G06F 9/445

http://www.epo.org/law-practice/case-law-appeals/pdf/t101987eu1.pdf

The application relates to a machine unit used in an automotive shop, for example a wheel balancer or automotive diagnosis unit. The machine unit comprises computing hardware, for instance an embedded PC, running control software which continuously collects operational data, namely issued error codes, calibration data, statistical data, performed service operations and operation counters. The invention concerns the updating/upgrading of control software or configuration data in the machine unit and the collection of operational data from the machine unit. Data is transferred to and from the machine unit using data storage devices, such as Compact Flash (CF) cards. Before a new data storage device (the "first data storage device" in claim 1) is connected to the machine unit, the previous data storage device (the "second data storage device" in claim 1), which contains stored operational data, is removed from the machine unit. The second data storage device is thus exchanged for the first data storage device. The machine unit checks to see whether the software/configuration data on the first data storage device is a newer version than that stored in the machine unit and, if so, replaces the data stored in the machine unit by that downloaded from the first data storage device, which is then used to store operational data. The removed, second data storage device is connected to a standalone PC (see claim 9) to download the stored operational data for use,

for instance by the manufacturer of the machine unit, in research and development, quality control, tracking of machine units through their life time and maintenance scheduling.

The independent claim 1 of the main request reads as follows:

"1. Method for exchanging data in memory means of at least one hardware device of a machine unit being an automotive shop service machine and for making operational data available for further use outside the machine unit, the method comprising:

- connecting a first data storage device to the machine unit;

- checking whether the data stored in the memory means of the at least one hardware device comprises an older version than the version of data on the first data storage device; and

- downloading data from the first data storage device in the memory means of the at least one hardware device, thereby replacing the data stored in the memory means by the data stored in the first data storage device, dependent on the result of the checking, wherein the method is

characterized by:

- before the step of connecting the first data storage device, disconnecting a second data storage device which is connected to the machine unit such that the step of disconnecting the second data storage device and the step of connecting the first data storage device form an exchanging operation, in which the second data storage device is exchanged by the first data storage device,

- continuously collecting operational data of the machine unit during operation of the machine unit, before the exchanging operation, by storing operational data of the machine unit in the second data storage device, and after the exchanging operation, by storing the operational data on the first data storage device,

- using the operational data stored on the second data storage device outside the machine unit for at least one of research and development purposes, quality control, tracking of machine units through their life time, and maintenance scheduling preferably by the manufacturer of the machine unit

wherein the stored operational data comprises at least one of issued error codes, diagnostic data, statistical data, performed service operations, operation counters."

The subject-matter of claim 1 differs from the disclosure of the closest prior art in the following features:

i. the machine unit being an automotive shop service machine,

ii. continuously collecting operational data of the machine unit during operation of the machine unit by storing operational data of the machine unit in a second data storage device, and, after exchanging the second data storage device by the first data storage device, by storing the operational data on the first data storage device,

iii. the stored operational data comprising at least one of issued error codes, diagnostic data, statistical data, performed service operations and operation counters and

iv. **using operational data stored on the second data storage device outside the machine unit for at least one of research and development purposes, quality control, tracking of machine units through their life time, and maintenance scheduling preferably by the manufacturer of the machine unit.**

In the light of the above analysis, difference feature "ii" is known from a further prior art document (in a wide sense of "operational data"), while difference features "i", "iii" and "iv" are not known from any of the prior art documents on file.

Difference feature "iv" solves the technical problem of monitoring the operation of the machine unit and is not hinted at by any of the prior art documents on file. The board finds that, starting from the closest prior art, it would not have been obvious to the skilled person to add this difference feature.

For the purposes of this decision it is consequently unnecessary to go into the question of whether it would have been obvious for the skilled person to combine the closest prior art and the further prior art document (disputed by the appellant), since even this combination does not render difference feature "iv" obvious.

Hence the board finds that the subject-matter of claim 1 involves an inventive step, Article 56 EPC 1973.

T 1529/10 (Modular monitor service/SAP) of 20.2.2013
Modular monitor service for smart item monitoring

Inventive step – yes

Applicant name: SAP AG
Application number: 07010671.1
IPC Class: H04Q 9/00, G06F 9/54

http://www.epo.org/law-practice/case-law-appeals/pdf/t101529eu1.pdf

The present invention relates to a system for monitoring smart item devices, for example of a network comprising RFID (radio frequency ID) tags. The system includes a service repository for storing "monitor services", which the board understands as software modules for installation in the "smart item" processing devices making up the monitoring system, and a service mapper for installing the monitor services to selected devices of the network. The monitoring network is arranged as a multi-tiered hierarchical architecture. The monitor services are made up of a core monitor service implementing fundamental monitoring functionalities used by all monitor services, and so-called "monitor service modules" which

implement functionality particular to a given monitor service/device. The monitor service modules are configured as plug-in components to be added to the core service on an as-needed basis.

The closest prior art, like the present invention, discloses a system for monitoring RFID tags. As in the present invention, the monitoring network is arranged as a multi-tiered hierarchical architecture. One layer is formed by a device controller which carries out "core functions". These are listed as: filters, enrichers, aggregators, writers, buffers, and senders. These functions are carried out by one or more data processors in the device controller.

The examining division identified three differences over the closest prior art, namely (cf. the impugned decision, section 2.1 of the reasons):

"(i) the system comprises a service repository configured to store the core monitor service as a template and that

(ii) the service repository additionally stores a plurality of monitor service modules, each of the monitor service modules being implemented by means of a respective module manager as a plug-in component that is added to the core monitor service on an as-needed basis and communicates with the core monitor service via a common interface which is shared by the plurality of monitor service modules, such that the core monitor service is extendable according to application-specific needs in that functionality related to communicating, data storage or data preprocessing may be added or replaced to a respective module monitor service without changing the core monitor device,

the system monitor comprises both the core monitor service and the at least one monitor service module, and that

(iii) the system further comprises a system mapper configured to select devices as selected devices from among the smart item devices of the device network, for deploying instances of the core monitor service onto at least two tiers of the hierarchical, multi-tiered monitor architecture and further once the core monitor service is installed, for deploying at least one monitor service module onto at least one tier of the hierarchical, multi-tiered monitor architecture."

The examining division then identified **three separate technical problems to be solved**, and argued that **each problem had an obvious solution based on the common knowledge** of the skilled person. Further prior art was mentioned to support this view in connection with distinguishing feature (ii). The examining division also commented that although features (i) to (iii) were analysed separately they did in fact interact, **but** that **combining them did not provide any further or surprising technical effect**. The examining division concluded that the claimed subject-matter as a whole did not involve an inventive step.

3.4 The examining division has clearly **made use of a "partial problems"** approach (see eg the Guidelines G-VII, section 5.2, last paragraph, and sections 6 and 7). In accordance with the Guidelines and Board of Appeal case law (cf. Case Law of the Boards of Appeal, 6th Edition 2010, Part D, section 8.2.2), such an approach is **appropriate where the distinguishing features concerned are not functionally interdependent, ie do not mutually influence each other to achieve a technical success over and above the sum of**

their respective individual effects. The board has to consider whether this is a reasonable approach in the present case.

In the board's view, the **overall problem to be solved starting out from the closest prior art is how to efficiently and flexibly program a large, scalable, multi-tiered monitoring network.** This is achieved, in accordance with the distinguishing features (i) to (iii), by having a single core module used by all devices and a plurality of additional, plug-in modules particular to certain devices, all centrally stored in a service repository and installed onto the various devices of the various tiers of the multi-tiered network using a service mapper. Each of these aspects is an interrelated part of an overall concept for efficiently managing the network. The **combination of these features cannot therefore, in the board's view, be fairly viewed as a mere aggregation of three unrelated features solving separate problems.** For this reason, the board finds the examining division's line of reasoning based on partial problems to be inappropriate.

The board therefore has to judge whether the combination of features of claim 1 involves an inventive step.

In order to arrive at the combination of features of claim 1, the skilled person starting out from the system of the closest prior art **has to perform a number of steps to incorporate the features (i), (ii) and (iii). There is no evidence on file that these features in combination belonged to the common knowledge of the skilled person in this field.** Furthermore, the examining division ignored aspects of features (ii) and (iii) when assessing inventive step, namely that a plurality of monitor service modules share a common interface with the core monitor service, and that instances of the core monitor service are installed on at least two tiers of the multi-tiered architecture. Claim 1 as amended during these appeal proceedings further defines a system adaptor in each of the monitor service modules for implementing the common interface. The board takes the view that the **skilled person, purely on the basis of alleged common knowledge, would not take the large number of steps required to arrive at the claimed subject-matter without the benefit of hindsight.**

T 0799/09 () of 22.1.2013
Selection of media items based on user reactions

Claims - clarity and support - (no)

Applicant name: Bose Corporation
Application number: 06101684.6
IPC Class: H04N 7/16, G06F 3/00, H04B 1/08

http://www.epo.org/law-practice/case-law-appeals/pdf/t090799eu1.pdf

Independent claim 1 according to the appellant's main request reads as follows:

"A method comprising, in connection with playing an item of audio, video, or multimedia content on an audio, video, or multimedia system (10),

receiving from a user (20) an indication of a reaction to the item from a selection from among presets, each preset representing reactions to items of audio, video, or multimedia content previously played by an audio, video, or multimedia system (10),

selecting an item to play based on the selected preset, and

modifying the preset based on a user reaction to the selected item,

characterised by

enabling the user (20) to indicate reactions explicitly (1814, 1815) and implicitly."

Clarity and support - Article 84 EPC 1973

The board considers that claim 1 according to the main request does not meet the requirements of clarity and support under Article 84 EPC 1973 for at least the following reasons:

Claim 1 refers to entities called "**presets**" and defines these in the claim by stating that "**each preset representing reactions to items of audio, video, or multimedia content previously played by an audio, video, or multimedia system**". Claim 1 also states that a "selected preset" serves as a basis for "selecting an item to play".

First, it is unclear from the definition of a preset in claim 1 whether a **preset comprises merely reactions** (such as "I like a little", "I like a lot", "I do not like at all", etc.) indicated by one or more users, **or also information as to which item is associated to which reaction by which user**.

Second, this definition is inconsistent with some of the examples of presets given in the description. For instance, a preset may include all the items (tracks) of one or more CDs even though the items have not been previously played. Similarly, in another embodiment, the preset contains "simple yes/no data for each stored track or album, representing whether that track or album is in the current preset or not", which does not require that the track or the album be previously played; for instance, there is no need to play a jazz CD to decide that it should not belong to a preset for pop music.

Third, according to the description the system may operate in several modes. Except in the "automatic selection mode", the preset is no more than a list of tracks (i.e. a playlist) which has no influence on the order in which the tracks within this list are played. In the "automatic selection mode", the preset (called a "user station") associates a probability to each track, the probability being generated and dynamically updated based on user-indicated preferences. It is **not clear whether the method of claim 1 covers all these modes or only the "automatic selection mode**" and its associated presets. Indeed, in the modes in which the preset is merely a playlist and the playing order is predetermined (e.g. "normal" or "shuffle"), the step of

"selecting an item to play based on the selected preset" in claim 1 may be construed as merely referring to selecting the next track in the playlist according to the predetermined order. Moreover, in the "automatic selection mode", the preset also includes (neutral) probabilities for tracks which have not yet been played, thereby contradicting the definition of a preset in claim 1 as representing reactions to items of audio, video, or multimedia content "previously played".

Finally, claim 1 further states that the method comprises a step of "receiving from a user (20) an indication of a reaction to the item from a selection from among presets". In the board's view, **it is unclear how the expression "from a selection from among presets" should be understood** - (Who selects? Is the selection of a preset a step of the method?) - and whether it refers to "reaction" or "item". Since the definition of "preset" in claim 1 refers to reactions, the most straightforward interpretation of the above phrase would be that the user indicates a reaction which is taken from a selection from among several lists of reactions to previously played items. This, however, is **not supported by the description** because none of the embodiments of the invention requires that the user's reaction must come from a preset, i.e. from a list of previous reactions, or "from a selection from among presets". In fact, in all the embodiments of the description the user is free to express a reaction, positive or negative, without being constrained by any past reaction.

Since claim 1 does not meet the requirements of Article 84 EPC 1973, the main request is not allowable.

T 0699/09 (Reduced keyboard/RIM) of 24.1.2013
KEYBOARD ARRANGEMENT

Inventive step - (no)
Inventive step - obvious alternative solution

Applicant name: Research In Motion Limited
Application number: 04802385.7
IPC Class: G06F 3/023, H04M 1/02

http://www.epo.org/law-practice/case-law-appeals/pdf/t090699eu1.pdf

Independent claim 1 of the application reads as follows:

"A handheld mobile communication device (10) with a physical keyboard (14), said device comprising:

a housing with a plurality of keys located at a front surface of the housing;

said plurality of keys comprising a first set of at least twelve and fewer than twenty-six keys having indicia of letters A to Z associated therewith so that at least a portion of the keys of said first set each have more than one letter indicia associated therewith, said letters being

arranged in a standard alphabetic keyboard arrangement, a second set of keys having indicia of numerals 0 to 9 associated therewith, said numerals being arranged in a numeric phone key arrangement (42) that is at least partially overlaid on said standard alphabetic keyboard arrangement, and a space key (84) having a height that is greater than the height of each of said first set of keys;

wherein the plurality of keys are arranged in a grid pattern having a plurality of columns and rows, and the space key (84) is positioned in a bottom row of keys and extends below a remainder of keys in the bottom row."

Like the present invention, the closest prior art is related to a reduced keyboard for combined text and numeric data entry on a mobile communication device and discloses, with regard to the wording of claim 1, a handheld mobile communication device with a physical keyboard comprising a housing with a plurality of keys located at a front surface of the housing. It further shows that the letter and numeral keys are arranged in a grid pattern having a plurality of columns and rows, wherein the space key is positioned in a bottom row of keys. In addition, it also discloses that the space key extends below a remainder of keys in the bottom row.

Hence, the **single difference** between the subject-matter of claim 1 and the prior art is seen in that the **space key has a height that is greater than the height of the remainder of the first set of keys**.

The alleged technical effect of this distinguishing feature consisted in the **provision of an improved tactile and visual distinction of the keys whilst meeting the requirements of a reduced keyboard on the handheld device**, and the objective problem to be solved by claim 1 was to **produce an improved reduced keyboard allowing tactile and visual key recognition**. The board, however, concludes that an **improved tactile and visual key recognisability of the space key is already achieved in the prior art** by the space key being centrally located in the bottom row and having a larger width than the other keys. Consequently, such an **objective problem is not admissible**.

Rather, the **objective problem** to be solved by claim 1 is regarded as being to **find an alternative solution which provides the same effect** of improving the ergonomic design of the space key within a reduced keyboard of a mobile device.

The skilled person would be aware from his common general knowledge that, apart from enlarging the width of a space key or its perimeter, other enlargement types were also suitable for improving the ergonomic setting of the handheld device. Hence, he would **readily select one of equally likely alternatives** (such as enlarging the key's height rather than its width) for improving the ergonomic properties of a mobile device's reduced keyboard arrangement, without exercising any inventive skills. In view of the above, the subject-matter of claim 1 does not involve an inventive step having regard to the prior art and the skilled person's common general knowledge (Article 56 EPC).

T 1805/08 (Digital department system/THOMSON) of 26.10.2012
DIGITAL DEPARTMENT SYSTEM

Inventive step (yes)

Applicant name: Thomson Licensing
Application number: 98938449.0
IPC Class: G06F 13/00, G06F 17/30, G06F 17/60

http://www.epo.org/law-practice/case-law-appeals/pdf/t081805eu1.pdf

The invention relates to a method for transmitting digital files with audio/video content from a "network management center" to a "multimedia server" in commercial sales outlet. A user at the center provides group IDs to the content files which are used to build a distribution file with content files having the same group ID. This distribution file is transmitted to the outlets with that group ID. The server in an outlet extracts the content files from the distribution file and stores them. On a request of a node in the outlet (e.g. a listening post or an audio/video endcap), the server transfers a content file to the node which is able to reproduce the content.

The sole independent claim of the sole request reads as follows:

"1. A method of creating and distributing of content to a user in a commercial sales outlet, comprising the steps of:

digitizing audio and/or visual content to provide digitized representations

providing in a network management center (110) group identification information for each audio and/or video contents for associating the digitized representations with commercial sales outlets (130) and for determining which digitized representations are to be included in a distribution file;

using the group identification information to select to which commercial sales outlets (130) the distribution file is to be distributed;

assembling the digitized representations into the distribution file;

transmitting the distribution tile to the selected commercial sales outlets (130);

receiving the distribution file at a plurality of commercial sales outlets (130);

disassembling the distribution file into at least one digitized component at one or more site of the plurality of commercial sales outlets (130);

storing the at least one digitized component on a multimedia server (160) in the commercial sales outlet (130); and

transferring the at least one digitized component to a node on a network in the commercial sales outlet (130) upon receipt of a request from the user, the node being capable of communicating information represented by the digitized component to the user."

The claim was originally refused for lack of inventive step. The difference between claim 1 and the closest prior art was identified to be the business entities and the distribution scheme as defined in the business scheme above. The interplay between a so-called "network management center", a "network operating center" and a "client site (sales outlet)" in distributing audio/visual content was described. The objective technical problem was considered as how to automate and implement the business scheme. The claimed solution was said not to go beyond mere automation of constraints imposed by the business procedure.

The board disagrees with the appealed decision in the determination of the objective problem. In order **to be able to consider automation as the technical problem, the business scheme to be automated would have to contain *only* features which do not contribute to the technical character** of the invention. This is not the case.

While the board agrees that the division of functions of a "network management center" and a "network operating center" does not seem to be technically necessary and might be commercially motivated, the **feature of "provid[ing] a designated file/dossier containing said content for distribution to the client site" contributes to the technical character**, since it discloses a specific **technical implementation for distributing electronic content**. One can imagine several technical alternatives, having different technical effects, as for example an on-demand delivery according to a concrete request from the node. Or one might omit the client-side caching in the multimedia server at the shop. Or one might distribute all available advertisements to all shops in advance, maybe with a file indicating which files were allowed to be displayed in a certain shop. These **alternatives would all have effects on bandwidth, storage needs and response time**.

Claim 1 differs from the closest prior art in:

- group IDs for each content file instead of statistical data indicating the high use content files for a given outlet;

- packaging several content files in a distribution file and transmitting the distribution file instead of transmitting single content files;

- transmitting the distribution file to several outlets selected with the help of the group IDs instead of on-demand transmission to each outlet;

- storing every content file on the multimedia server at the outlet instead of only high use content files (whereby the high use measuring is possibly manipulated by predetermined statistical weights of "hit" content files).

The **objective technical problem resulting from this difference is how to reduce the download time for a content file requested from a node in an outlet**.

One straightforward solution is to increase the number of content files in the cache. The maximal possible number are all content files stored at the network management center. However, that might be too much data to be transmitted to and stored on a (relatively) small multimedia server at the outlet. One solution would be to transmit and store as many content files as there is storage space at the multimedia server. However, the solution chosen by the invention is to target the content files to the outlets: only those content files from the network

management server are transmitted and stored at the multimedia server which are expected to be requested in a specific store. An example given in the grounds of appeal is the group of Spanish speaking areas (e.g. in the USA). Spanish content is only sent to outlets in Spanish speaking areas - and every Spanish content file is is transmitted in advance to the selected outlets, and not only the high use files. The selection is done by group IDs, given in advance to any content file. Later on, when the transmission is prepared, the group IDs are also assigned to the outlets, so that the attribution of the content files to the outlets does not need the user to select each single content file per outlet. This reduces the necessary input. Then the invention chose to build the subset in a single distribution file. An alternative would be to send each content file of a specific outlet separately. However, a single distribution file has the advantage that it is prepared only once for any outlet with the same group IDs.

It results from the above that, unlike previous claim 1, claim 1 as it stands now, **cannot be dismissed on the general ground that a mere automation of a business scheme does not involve any inventive step because the technical choices made in this claim compared to the prior art or the technical possibilities precisely cannot be reduced to a process of a mere automation**.

Indeed, the invention has **chosen a specific solution (grouping and packaging) with specific effects to reduce the download time** for content files which avoids transmitting too many files in advance to the multimedia server at an outlet. The board does not consider that it would have been obvious to modify the closest prior art to incorporate this chosen solution. Nor do the other documents in the procedure give any hint of this approach. The board also has no reason to think that the search carried out was incomplete. Therefore, claim 1 is inventive in the sense of Article 56 EPC.