

**THIS OPINION WAS NOT WRITTEN FOR PUBLICATION**

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 29

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

---

Ex parte HIDEYUKI HANAOKA, ICHIRO MINAMI, RYOJI KURIBAYASHI,  
TAKUYA KUWAHARA, MUNENORI FUJIMOTO, KAZUMA YOSHIDA  
and TAKASHI OKIYAMA

---

Appeal No. 96-3561  
Application No. 08/045,241<sup>1</sup>

---

ON BRIEF

---

Before KRASS, FLEMING and FRAHM, Administrative Patent Judges.  
KRASS, Administrative Patent Judge.

**DECISION ON APPEAL**

This is a decision on appeal from the final rejection of claims 1 through 20 and 35. Claims 21 through 33 have been

---

<sup>1</sup> Application for patent filed April 13, 1993.

Appeal No. 96-3561  
Application No. 08/045,241

withdrawn as a result of a restriction requirement and claim 34 has been canceled.

The invention is directed to an information processing system which displays an appearance change of the apparatus as graphic data in accordance with change of operation modes. More particularly, the shape of an icon changes when the information processing device is operated in each of a plurality of operation modes so that the appearance of the icon always corresponds to the overall appearance of the information processing device.

Representative independent claim 1 is reproduced as follows:

1. An information processing system comprising:

an information processing device which has a plurality of operation modes and whose appearance is changed in accordance with a change of operation mode:

a memory means for memorizing graphic data, said graphic data representing each operating mode as an overall appearance of said information processing device in each operation mode; and

a display means for reading out a graphic data, corresponding to an operation mode of the information processing device, from said memory means and displaying it on a display screen thereof as an icon;

Appeal No. 96-3561  
Application No. 08/045,241

wherein a shape of the icon changes when the information processing device is operated in each of the operation modes so that an appearance of the icon always corresponds to the overall appearance of the information processing device.

The examiner relies on the following references:

Hayden 1987	4,653,090	Mar. 24,
Rasmussen et al. (Rasmussen) 24, 1987	4,653,094	Mar.
Togawa et al. (Togawa) 1992	5,121,442	Jun. 9,
Japanese patent (Shirai) 23, 1992	4-122991	Apr.

Claims 1 through 20 and 35 stand rejected under 35 U.S.C. 103. As evidence of obviousness, the examiner offers Hayden with respect to claims 1, 6, 7, 11, 14 through 17, 19 and 20, adding Shirai with respect to claims 8 through 10, 12 and 13. With regard to claim 18, the examiner cites Hayden and Togawa and, with regard to claims 2 through 5 and 35, the examiner cites Hayden and Rasmussen.

We refer to the brief and answer for the respective positions of appellants and the examiner.

OPINION

We have carefully reviewed the evidence of record, including, inter alia, the arguments of appellants and the examiner and, based on such a review, we will sustain the rejection of claims 1, 14, 19, 20 and 35 under 35 U.S.C. 103 but we will not sustain the rejection of claims 2 through 13 and 15 through 18 under 35 U.S.C. 103.

With regard to claims 1, 6, 7, 11, 14 through 17, 19 and 20, the examiner applies Hayden, alone, contending that Hayden shows an information processing system comprising a computer and a display for displaying graphic data (telephone icons) to represent operation modes (active mode, hold mode, incoming mode, conference call mode) of the processing system. Hayden clearly indicates that the "shape" of the icon can be changed, "depending upon the state of the party" [column 5, lines 23-27]. While the claimed memory is not explicitly shown, the examiner contends that it would have been "obvious to have a memory in Hayden's system to store the graphic data since a computer needs a memory to store and process data." With regard to claims 6, 7, 14 and 17, specifically, the examiner contends that it would have been "obvious to have memory means

Appeal No. 96-3561  
Application No. 08/045,241

and external memory means to store graph data and character data, so as to provide more information to a computer system" [answer-page 3].

We agree with the examiner, concerning claim 1, in that the telephone graphic icons of Hayden must be stored in a memory and the artisan would have understood that Hayden has a memory means to store such graphics even if not explicitly shown or disclosed.

Appellants argue that there is nothing in Hayden which would have suggested "that the shape of the icon be changed to reflect the actual overall appearance of the telephone in a given state" [brief-page 8]. We disagree. While we understand appellants' argument to the extent that the disclosed preferred embodiment shows the icon to be representative of a facsimile machine and that when the phone is off the hook on the actual machine, that situation is also shown by the icon, when the phone is on the hook on the actual facsimile machine, that is also depicted by the icon, etc., we believe the actual claim language is broad enough to cover what is disclosed by Hayden.

Appeal No. 96-3561  
Application No. 08/045,241

While Hayden is not explicit as to what change the shape of the icon may take, it is clearly suggested by Hayden that the shape of the icon may change, depending upon the state of the party. Accordingly, since the "state of the party" may refer to whether a calling party is on the line or not on the line, the skilled artisan would have realized that the shape of the icon may be modified to depict such situations, or a "state of the party." If the artisan is going to change the shape of the telephone icon to represent these states, it appears to us that the artisan would have been led to provide for an icon showing the telephone with the receiver on the cradle for "off line" and an icon of the telephone with the receiver off the cradle for "on line." This would have been the obvious choice of changing the shape of the icon to depict a different "state of the party." Since the actual appearance of the telephone in Hayden would be the receiver on the cradle when in an off-line condition and the receiver off the cradle in an on-line condition, Hayden does, indeed, suggest that the shape of the icon changes when the device is operated in different operation modes so that "an appearance of the icon

Appeal No. 96-3561  
Application No. 08/045,241

always corresponds to the overall appearance of the information processing device," as broadly claimed.

Accordingly, we will sustain the rejection of claim 1 under 35 U.S.C. 103 over Hayden.

Claim 14 recites a memory means having a first region for storing character information and a second region for storing external characters and also storing graphic data representing operation circumstances. Additionally, the claim recites a "key means" for selecting an operation mode. Appellants' sole argument regarding this claim is that Hayden "fails to disclose or suggest the combination of the first and second memory means of claims 7 and 14" [brief-page 9].

We note that, contrary to appellants' assertion, claim 14 does not recite a first and second memory means. Instead, a single "memory means" including first and second memory regions, is recited. In any event, the examiner argues that it would have been "obvious to have memory means and external memory means to store graph [sic, graphic?] data and character data, so as to provide more information to a computer system" [answer-page 3]. This argument appears reasonable to us since memories do hold the information to be employed by a

Appeal No. 96-3561  
Application No. 08/045,241

processing system and each memory can be thought of as having a plurality of regions for storing various information.

Appellants do not address this issue and, accordingly, we will find for the examiner and sustain the examiner's rejection of claim 14 under 35 U.S.C. 103.

With regard to claim 19, the examiner contends that Hayden teaches a key means (30) for selecting an operation function and a control means (10) for controlling graphic data to be displayed on display (50). Appellants argue that Hayden "fails to disclose or suggest the use of an external portable memory means, such as IC card, as defined in claims 19-20" [brief-page 9].

While Hayden certainly does not disclose a second, external memory means, it would have been obvious to artisans that memory may be provided to the system in many different forms, including external memory cards, for enabling optionally renewable information to be provided to the processor.

We will sustain the rejection of claims 19 and 20 under 35 U.S.C. 103.

Appeal No. 96-3561  
Application No. 08/045,241

We also will sustain the rejection of claim 35 under 35 U.S.C. 103 since the telephone environment and icons of Hayden are so closely related to a facsimile machine, we find that the skilled artisan would have found it obvious to apply Hayden's teachings to facsimile equipment. Moreover, appellants do not present a separate argument regarding claim 35.

With regard to the rejections of independent claims 6, 7, 11, 15 and 17 under 35 U.S.C. 103 over Hayden, we will not sustain these rejections because, in our view, each of these claims contain specific limitations which are not found to be taught or suggested by Hayden.

With regard to claim 6, the graphic data is memorized in an external character memory region which is independent of a character code memory region of the same memory means. While it may have been obvious to provide for an external memory, we find that there would need to be something more to suggest that the graphic data is memorized in an external character memory region which is independent of a character code memory region of the memory means. A specific relationship is recited here, viz., that the graphic data memorized in an

Appeal No. 96-3561  
Application No. 08/045,241

external character memory region is *independent* of a character code memory region of the memory means, and the examiner's rationale never comes to grips with that claimed relationship. Accordingly, the examiner has not established a prima facie case of obviousness with regard to independent claim 6.

Similarly, in claim 7, there are recited two memory means, one of which memorizes a part of a pattern in each operation mode and the other memory memorizes another part of the pattern representing the appearance of the processing system as an external character code data. It is not enough for the examiner merely to contend that it would have been obvious to have a memory means and an external memory means "so as to provide more information to a computer system" because claim 7 requires more than a mere provision of extra memory. In this case, the first memory memorizes a part of a pattern and the second memory means memorizes another part of that same pattern and the display is based on a composite graphic image. This goes to the idea of the divided graphic data which appellants employ in order to update the display rapidly since only a portion of the total graphic data to be

Appeal No. 96-3561  
Application No. 08/045,241

displayed needs to be changed. Hayden has no such teaching or suggestion of this specifically claimed limitation.

Accordingly, we will not sustain the rejection of claim 7 under 35 U.S.C. 103.

Claim 11 also recites a memory means having a "character code memory region and an external character memory region, for memorizing a graphic data relating to said specific function in said external character memory region." While the examiner points to a "key means" and a "control means" in Hayden, with regard to claim 11 [answer-page 3], the examiner never comes to grips with the specific structure of the memory, as claimed, noting only, with regard to previous claims, that it would have been "obvious to have memory means and external memory means to store graph data and character data, so as to provide more information..."

While claim 11 appears similar to claim 14, the rejection of which we have sustained, the language of claim 11 ties together the character code memory region and the external character memory region by reciting that the memory means is "for memorizing a graphic data relating to said specific function [selected by the key means] in said external

Appeal No. 96-3561  
Application No. 08/045,241

character memory region." In claim 14, the first and second memory regions are recited as storing character information and external characters, respectively, with the second memory region also storing graphic data. The rest of claim 14, relating to the key means and the control means, does not clearly tie in the memorization of graphic data relating to the specific function selected by the key means, as does claim 11. Moreover, appellants never argued any portion of claim 14 other than to say that Hayden does not disclose the combination of first and second memory means.

We also will not sustain the rejection of claims 12 and 13 under 35 U.S.C. 103 because these claims depend from claim 11 and Shirai does not provide for the deficiencies of Hayden in this regard. Moreover, we find no suggestion of each graphic data being paired with a corresponding character code memorized in the character code memory region, as required by claim 12.

We also will not sustain the rejection of claims 17 and 18 since independent claim 17 also goes to the display of a "composite image" on the display screen, in addition to reciting the character code memory region and the external

Appeal No. 96-3561  
Application No. 08/045,241

character memory region, "for memorizing a graphic data relating to said specific function [selected by the key means] in said external character memory region." As explained supra, Hayden does not disclose or suggest the composite image nor does Hayden disclose or suggest the memorization of graphic data relating to the specific function in the external character memory region. With regard to claim 18, Togawa is cited by the examiner for a teaching of solid and dotted lines used in a graphic and does not remedy the deficiencies noted with regard to Hayden.

We now turn to independent claim 2 which includes, inter alia, a memory means for memorizing "divided graphic data, which are combinable and compose a combined graphic data representing an overall appearance of said information processing device..." The examiner relies on Rasmussen to supply the deficiency of Hayden, i.e., the divided graphic data. However, it is clear that the displays LCD1 and LCD2 of Rasmussen are independent displays, either a display showing a hook-on condition or a display showing a hook-off condition. Rasmussen does not incorporate graphic data in a manner so as

Appeal No. 96-3561  
Application No. 08/045,241

to combine the divided graphic data in order to create a composed graphic image, as claimed.

Accordingly, we will not sustain the rejection of claim 2, or of claims 3 through 5 which depend therefrom, under 35 U.S.C. 103, based on the evidence provided by the applied references.

With regard to independent claim 8, this claim recites, inter alia, the first and second memories, wherein the second memory has the first region for storing predetermined character information as character code data and a second region for storing predetermined graphic information as external character codes. In addition, the claim requires a control means for "composing said character information with said graphic data of said first memory means to display a composite image..." The examiner cites Shirai for the teaching of a composite image formed from data from a first and second memory and contends that it would have been obvious to modify Hayden with Shirai "so that data coming from different memory means (11, 12) could be combined together in a temporary store means (16) and output to a display means (17)" [answer-page 3].

Appeal No. 96-3561  
Application No. 08/045,241

We fail to see anything which would have led the artisan to make the combination sought by the examiner. As appellants point out [brief-page 5], Shirai's composing circuit composes an image by combining background image data with character data. While we do find that Hayden's graphic data (relating to the telephone) does represent an appearance of an information processing device (the actual telephone), the icon in Hayden is not formed by composing divided graphic data and the image of Shirai is not formed from divided graphic data, or from character information and graphic information, as recited in instant claim 8. Therefore, it is not clear why the skilled artisan would have combined the teachings of Hayden and Shirai in order to form a composite image in Hayden comprising character information from a second memory and graphic data of a first memory. It is especially unclear what would have led the artisan to make such a modification in Hayden when Hayden is not concerned with composing an image from divided graphic data.

Accordingly, we will not sustain the rejection of independent claim 8, nor the rejection of claims 9 and 10 which depend therefrom, under 35 U.S.C. 103.

Appeal No. 96-3561  
Application No. 08/045,241

We have not sustained the rejection of claims 2 through 13 and 15 through 18 under 35 U.S.C. 103. We have, however, sustained the rejection of claims 1, 14, 19, 20 and 35 under 35 U.S.C. 103. Accordingly, the examiner's decision is affirmed-in-part.

Appeal No. 96-3561  
Application No. 08/045,241

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

**AFFIRMED-IN-PART**

ERROL A. KRASS	)	
Administrative Patent Judge	)	
	)	
	)	
	)	
	)	BOARD OF PATENT
MICHAEL R. FLEMING	)	APPEALS
Administrative Patent Judge	)	AND
	)	INTERFERENCES
	)	
	)	
ERIC FRAHM	)	
Administrative Patent Judge	)	

bae

Appeal No. 96-3561  
Application No. 08/045,241

Rossi & Associates  
P.O. Box 826  
Ashburn, VA 22011