Paper No. 16

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

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Ex parte KENNETH P. DAVIS

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Appeal No. 2003-0193
Application 09/306,469

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ON BRIEF

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Before BARRETT, FLEMING and OWENS, *Administrative Patent Judges*.

OWENS, *Administrative Patent Judge*.

DECISION ON APPEAL

This appeal is from the final rejection of claims 1-38, which are all of the claims in the application.

THE INVENTION

The appellant claims a voice macro control method and system for voice controlled capture devices such as flatbed scanners,

hand-held scanners and digital scanning cameras. Claim 1, directed toward the method, is illustrative:

1. A voice macro control method for a voice controlled capture device comprising the steps of:

(a) receiving a first voice macro command voice input in a voice pickup component of said voice controlled capture device;

(b) converting said first voice macro command voice input into a first digital signal and sending said first digital signal to a host processor;

(c) converting, within said host processor, said first digital signal into a first recognition pattern;

(d) comparing said first recognition pattern to at least one stored recognition pattern stored in a voice macro command recognition table;

(e) when said first recognition pattern matches one of said at least one stored recognition patterns stored in said voice macro command recognition table, retrieving a voice macro command file linked to said one of said at least one stored recognition patterns, and sending said voice macro command file to said capture device;

(f) accessing, within said capture device, at least one command number from said voice macro command file;

(g) finding a matching command number in a voice command recognition table;

(h) retrieving a first voice command file linked to said matching command number in said voice command recognition table; and

(i) executing at least one instruction from said first voice command file.[1]

THE REFERENCES

Brais et al. (Brais)	5,995,936	Nov. 30, 1999 (filed Feb. 4, 1997)
Ackley et al. (Ackley)	6,199,044	Mar. 6, 2001 (filed May 27, 1998)

THE REJECTIONS

The claims stand rejected under 35 U.S.C. § 103 as follows: claims 1, 2, 5, 6, 12, 13, 16, 21, 29 and 30 over Brais in view of Ackley, and claims 3, 4, 7-11, 14, 15, 17-20, 22-28 and 31-38 over Brais in view of Ackley and well-known prior art.

OPINION

We reverse the aforementioned rejections. We need to address only the independent claims, i.e., claims 1, 21 and 30.

Claim 1

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[1] The appellant should consider whether the specification provides adequate written descriptive support under 35 U.S.C. § 112, first paragraph, for "sending said voice macro command file to said capture device" and "accessing, within said capture device, at least one command number from said voice macro command file" in claim 1. The specification discloses (page 12, lines 23-26), in the alternative, accessing a command number from voice command recognition table 126 for a stand alone unit (having no host processor; page 3, lines 23-26) or, for a connected unit, i.e., one having a host processor, which is the claimed embodiment, accessing a command number from voice command recognition table 222 which is part of host processing system 200 (figure 2), not part of capture device 100 (figure 1).

Brais discloses a voice control method wherein commands spoken by an operator into a transducer (microphone 106, which corresponds to the appellant's voice pickup component) are sent to a computer (102) where a speech to text (voice recognition) device converts the signals from the transducer into digital signals which are compared to known commands (col. 6, lines 46-53; col. 9, lines 25-28; col. 10, lines 38-44). The spoken commands control computer operations and data processing (col. 3, lines 49-52; col. 6, lines 10-13). The computer sends to a camera (104, which the examiner relies upon as being the appellant's capture device (answer, page 11)), commands include commands to capture an image, send a representation of an image to the computer, zoom the camera lens, alter the focus of the camera lens, and change the camera lens' aperture settings (col. 6, lines 38-45).

Even if Brais' device which converts the digital signals to a recognition pattern and compares the recognition pattern to known commands is considered to be a host processor, Brais differs from the appellant's claim 1 by lacking a disclosure that 1) the voice command is a macro command, 2) the recognition pattern corresponding to the voice macro command is compared to at least one recognition pattern stored in a voice macro command

recognition table, 3) a voice macro command file linked to the at least one stored recognition pattern is sent to the camera, 4) at least one command number from the voice macro command file is accessed within the camera, 5) a matching command number is found in a voice command recognition table, and 6) a voice command file linked to the matching command number is retrieved from the voice command recognition table.

The examiner relies upon Brais' column 14, lines 14-15 for a disclosure of command macros (answer, page 4). This portion of Brais, however, discloses a pseudo command file, which may be a Word® macro, which is parsed to construct a report. The macro is not involved in controlling the camera.

The examiner argues that Brais' camera necessarily has a built-in controller for executing the recognized commands from the computer (answer, page 10). Even if this is correct, the appellant's claim 1 requires that a voice macro command file is sent to the capture device, at least one command number is accessed from the voice macro command file within the capture device, a matching command number is found in a voice command recognition table, and a voice command file linked to the matching command number is retrieved from the voice command recognition table. The examiner does not explain how Brais would

have fairly suggested these limitations to one of ordinary skill in the art.

The examiner states that Ackley is not needed for the rejection (answer, page 11) but, as discussed above, the examiner does not explain how Brais would have fairly suggested, to one of ordinary skill in the art, a number of the limitations in the appellant's claim 1.

Ackley discloses a universal input device having a two-dimensional imager (102) coupled to a processor (104) (col. 3, lines 2-4). The two-dimensional imager can input data to the processor from various documents (col. 1, lines 66-67), and "an audio input unit [122] can receive voice instructions, which are digitized, converted and input to the processor" (col. 2, lines 5-7). The audio input unit includes a microphone (124) (col. 4, line 59) and "may not only amplify and digitize audio input data, but perform additional functions. For example, the audio input unit **122** may include speech-to-text capabilities for converting speech into ASCII or other digital formats. Overall, the audio input unit **122** may receive both audio data and voice commands for operating the universal input device **100**" (col. 4, line 64 - col. 5, line 3). The benefit of the universal input device is that "[r]edundant circuitry, such as redundant

processors, are eliminated by consolidating various input devices into the single universal input device" (col. 2, lines 10-12).

The examiner argues that Ackley would have led one of ordinary skill in the art to eliminate redundant circuitry in Brais' method by using a host processor rather than incorporating a processor into the camera (answer, pages 4-5). Even if Ackley would have fairly suggested such a host processor to one of ordinary skill in the art, the examiner does not explain how Brais and Ackley would have led such a person carry out the steps in the appellant's claim 1 of accessing at least one command number from a voice macro command file within the capture device, finding a matching command number in a voice command recognition table, and retrieving a voice command file linked to the matching command number from the voice command recognition table.[2]

[2] The examiner argues that Ackley implies that the processor sends a command to activate a switch of the capture device (answer, page 11). Ackley discloses that the universal input device can include a trigger switch as a user input for inputting signals to the processor (col. 4, lines 9-15). As pointed out by the examiner (answer, page 11), Ackley states that "[b]y activating the trigger switch, the processor **104** causes the two-dimensional imager **102** to provide image signals to the processor **104**" (col. 4, lines 14-17). The teaching that the trigger switch is for user input of signals to the processor (col. 4, lines 9-15), however, indicates that "[b]y activating the trigger switch", Ackley means "by a user activating the trigger switch", not "by the processor activating the trigger switch".

For the above reasons we conclude that the examiner has not carried the burden of establishing a *prima facie* case of obviousness of the method claimed in the appellant's claim 1. We therefore reverse the rejections of this claim and claims 2-20 that depend directly or indirectly therefrom.

Claims 21 and 30

The appellant's claims 21 and 30, which claim a voice controlled capture system, both require a host processor which 1) contains a memory for storing a voice macro command recognition table, 2) compares a first recognition pattern to at least one recognition pattern stored in the voice macro command recognition table, 3) when there is a match, retrieves a voice macro command file linked to the matched recognition pattern stored in the voice macro command recognition table, 4) accesses at least one command number from the voice macro command file, 5) finds a matching command number in a voice command recognition table, and 6) retrieves a first voice command file linked to the matching command number.

The examiner does not point out where Brais or Ackley discloses these limitations, or explain how Brais and Ackley would have fairly suggested these limitations to one of ordinary skill in the art. The examiner relies upon the arguments

discussed above with respect to claim 1 (answer, pages 4-5). These arguments are not persuasive for the reasons given above regarding the rejection of that claim.

Accordingly, we reverse the rejections of independent claims 21 and 30 and dependent claims 22-29 and 31-38.

DECISION

The rejections under 35 U.S.C. § 103 of claims 1, 2, 5, 6, 12, 13, 16, 21, 29 and 30 over Brais in view of Ackley, and claims 3, 4, 7-11, 14, 15, 17-20, 22-28 and 31-38 over Brais in view of Ackley and well-known prior art, are reversed.

REVERSED

LEE E. BARRETT Administrative Patent Judge	)
MICHAEL R. FLEMING Administrative Patent Judge	) BOARD OF PATENT) APPEALS AND) INTERFERENCES
TERRY J. OWENS Administrative Patent Judge	)

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