

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 21

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ALAN N. COOPER

Appeal No. 1998-0740
Application 08/627,838¹

ON BRIEF

Before URYNOWICZ, FLEMING and HECKER, Administrative Patent Judges.

URYNOWICZ, Administrative Patent Judge.

Decision on Appeal

This appeal is from the final rejection of claims 1-19, all the claims pending in the application.

The invention pertains to a video processing system. Claim 1 is illustrative and reads as follows:

A video processing system, comprising:
an image sensor comprising an image area operable to receive light to form image data representative of an image, the image

¹ Application for patent filed April 3, 1996.

Appeal No. 1998-0740
Application 08/627,838

sensor operable to clear the image data from the image sensor responsive to an image clear signal;

an image memory coupled to the image sensor image area and operable to receive the image data from the image sensor image area and to store the image data responsive to an image transfer signal, an exposure time associated with the image defined as the time between the image clear signal and the image transfer signal;

an electronic iris controller circuit coupled to the image sensor image area and the image memory and operable to create and transmit the image clear signal and the image transfer signal, the electronic iris controller circuit operable to alter the exposure time in response to the image data by increments having variable length having increasingly smaller duration as the exposure time is decreased and having increasingly greater duration as the exposure time is increased; and

an accordion clock signal having a constant number of transitions for a given period of time and having variable periods for at least some of the transitions, the increments having variable length are derived from the accordion clock signal.

The references relied upon by the examiner as evidence of obviousness are:

Ishizaki et al. (Ishizaki)	4,701,626	Oct. 20, 1987
Nagai et al. (Nagai)	4,742,395	May 03, 1988
Nakajima et al. (Nakajima)	5,157,502	Oct. 20, 1992

Claims 1-5, 7-10, 12-17 and 19 stand rejected under 35 U.S.C. § 103 as being unpatentable over Nakajima in view of Nagai.

Claims 6, 11 and 18 stand rejected under 35 U.S.C. § 103 as being unpatentable over Nakajima in view of Nagai and Ishizaki.

The respective positions of the examiner and the appellant with regard to the propriety of these rejections are set forth in

Appeal No. 1998-0740
Application 08/627,838

the final rejection (Paper No. 16) and the examiner's answer (Paper No. 20) and the appellant's brief (Paper No. 19).

Arguments

Appellant argues that none of the references of record teaches or suggests the subject matter of claim 1 reciting "an accordion clock signal having a constant number of transitions for a given period of time and having variable periods for at least some of the transitions, the increments having variable length are derived from the accordion clock signal". Citing column 7, lines 35-48 and column 8, lines 21-31, of Nakajima, appellant further argues that control circuit 42 does not alter the exposure time in response to the image data. Lastly, it is urged that there is no motivation in the art to combine the clock signal of Nagai with the device of Nakajima.

With respect to appellant's first argument, the examiner draws attention to a clock circuit in Fig. 6 of Nagai. The examiner contends that Nagai's disclosure with respect to Fig. 6 teaches that the circuit divides a clock signal generated in OSC 71 to generate normal speed transfer decoded signal 83a and high

Appeal No. 1998-0740
Application 08/627,838

speed transfer decoded signal 84a. The decoded signals are applied to decoder 85 to produce CCD drive signals E1-E4. According to the examiner, Fig. 7 of Nagai shows that, like appellant's accordion clock signal, signals E1-E4 have a constant number of transitions for a given period of time and have variable periods for at least some of the transitions.

As to appellant's second argument, the examiner avers that control circuit 42 in Nakajima does alter exposure time in response to image data. Referring to Fig. 4, the position is taken that image data from device 31 is detected by detection device 35, compared to the reference voltage in amplifier 36, converted by A/D converter 41, and is supplied as shutter controlling voltage data to the controlling circuit 42.

Lastly, as to appellant's third argument, the examiner contends that "In this case, One [sic] of ordinary skill in the art would include [sic: the] clock signal driving circuit of Nagai, in the clock signal controlling shutter speed, shutter speed control 18 of Nakajima, to provide [sic: an] improved high speed video camera".

Opinion

Appeal No. 1998-0740
Application 08/627,838

After consideration of the positions and arguments presented by both the examiner and the appellant, we have concluded that the rejection should not be sustained. We agree with appellant that there is no teaching or motivation to combine Nakajima and Nagai. The examiner has provided no explanation in support of his position that the combination would have in fact resulted in an improved high speed video camera, nor is it explained why one of ordinary skill in the art would have found it obvious to combine the teachings to achieve an improved high speed camera.

We further note that the examiner has not shown that any of the aforementioned signals E1-E4 of Nagai are utilized to alter charge accumulation time (exposure) of photoelectric elements 7 by increments having variable length. Column 7, lines 53-68, of Nagai indicates that the photoelectric elements are charged at regular intervals, such as 1/1000 of a second, between read pulses 36 and 37. Such being the case, there appears to be no teaching, motivation or suggestion to utilize signals E1-E4 as clock signals in Nakajima to alter charge accumulation time.

Even though we will not sustain the rejection of the claims before us, we do agree with the examiner that Nagai's signals E1-E4 have a constant number of transitions for a given period of

Appeal No. 1998-0740
Application 08/627,838

time and have variable periods for at least some of the transitions. In Fig. 7, the variable periods are illustrated between pulses 36 and 37, and 37 and 39. We further agree with the examiner that control circuit

42 of Nakajima does alter exposure time in response to image data for the reasons given by the examiner in the answer.

REVERSED

STANLEY M. URYNOWICZ, JR.)
Administrative Patent Judge)
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Appeal No. 1998-0740
Application 08/627,838

MICHAEL R. FLEMING
Administrative Patent Judge

STUART N. HECKER
Administrative Patent Judge

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