

The opinion in support of the decision being entered today was not written for publication in a law journal and is not binding precedent of the Board.

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 KOICHI TOYAMA,  
KOICHI KATO,  
and KENJI AIDA

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Appeal No. 1998-1915  
Application No. 08/670,123

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HEARD: November 29, 2000

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Before FLEMING, RUGGIERO, and BARRY, Administrative Patent Judges.

BARRY, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the rejection of claims 9-18. We affirm-in-part.

BACKGROUND

The invention at issue in this appeal relates to high-voltage discharge lamps. High-voltage discharge lamps such as metal halide lamps are used as headlights in vehicles. Such a

discharge lamp is lit or started using an alternating current (AC). In the case where the lamp is in a cold state, the intensity of light generated by the lamp remains low until the pressure of a metal vapor therein rises to a sufficient level. Immediately after being started from the cold state, however, the lamp goes out upon a change of the polarity or direction of a lamp current between a positive side and a negative side.

The appellants' lighting device operates on a high-voltage discharge lamp. The device includes a starting switch and a bridge control circuit. The circuit supplies a low frequency AC power to the lamp immediately after the lamp is activated. After a time, the circuit supplies a higher frequency AC power to the lamp.

Claim 9, which is representative for our purposes, follows:

9. A lighting device for a discharge lamp, comprising:

a starting switch movable into an on position;

first means connected to the starting switch for feeding an alternating current of a variable

frequency to the discharge lamp after the starting switch moves into the on position; and

second means connected to the first means for increasing the frequency of the alternating current in accordance with lapse of time over an interval of time during which the discharge lamp remains activated.

The references relied on in rejecting the claims follow:

Leyten	5,319,286	June 7,
1994		
Yamashita et al. (Yamashita)	5,486,740	Jan.
23, 1996		
		filed Nov. 23, 1994.

Claims 9-18 stand rejected under 35 U.S.C. § 102(e) as anticipated by Yamashita. Claims 11-18 also stand rejected under 35 U.S.C. § 103 as obvious over Yamashita. Claim 16 further stands rejected under § 103 as obvious over Yamashita in view of Leyten. Rather than repeat the arguments of the appellants or examiner in toto, we refer the reader to the briefs and answer for the respective details thereof.

OPINION

In deciding this appeal, we considered the subject matter on appeal and the rejections advanced by the examiner. Furthermore, we duly considered the arguments and evidence of the appellants and examiner. After considering the totality of the record, we are persuaded that the examiner did not err in rejecting claims 9 and 10 but did err in rejecting claims 11-18. Accordingly, we affirm-in-part.

We begin by noting the following principles from Rowe v. Dror, 112 F.3d 473, 478, 42 USPQ2d 1550, 1553 (Fed. Cir. 1997).

A prior art reference anticipates a claim only if the reference discloses, either expressly or inherently, every limitation of the claim. See Verdegaal Bros., Inc. v. Union Oil Co., 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "[A]bsence from the reference of any claimed element negates anticipation." Kloster Speedsteel AB v. Crucible, Inc., 793 F.2d 1565, 1571, 230 USPQ 81, 84 (Fed. Cir. 1986).

We also note the following principles from In re Rijckaert, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993).

In rejecting claims under 35 U.S.C. Section 103, the examiner bears the initial burden of presenting a prima facie case of obviousness. In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992).... "A prima facie case of obviousness is

established when the teachings from the prior art itself would appear to have suggested the claimed subject matter to a person of ordinary skill in the art." In re Bell, 991 F.2d 781, 782, 26 USPQ2d 1529, 1531 (Fed. Cir. 1993) (quoting In re Rinehart, 531 F.2d 1048, 1051, 189 USPQ 143, 147 (CCPA 1976)).

With these principles in mind, we consider the patentability of the following groups of claims:

- claims 11-18
- claims 9 and 10.

#### Claims 11-18

The examiner asserts, "the AC frequency of Yamashita et al. starts at 250Hz and then over an interval of time that includes part of the 'DC lighting period' when the lamp remains lit and also activated the frequency of the alternating current applied to the lamp is increased from the 250 Hz value or zero frequency value to a value that is around 500 Hz and this is all done in accordance with lapse of time ...." (Examiner's Answer at 9.) The appellant argues, "Yamashita et al merely teaches providing a low frequency AC supply to a lamp 'before the activation' and a high frequency AC supply 'after the activation.'" (Appeal Br.

at 10.)

Claims 11-18 specify in pertinent part the following limitations: "supply a first alternating-current electric power to the discharge lamp during a time interval immediately after activation of the discharge lamp, ... supply a second alternating-current electric power to the discharge lamp after the time interval elapses; wherein the second alternating-current electric power has a frequency higher than a frequency of the first alternating-current electric power."

Accordingly, the claims require supplying a low frequency AC power to a discharge lamp immediately after the lamp is activated and, after a time, supplying a higher frequency AC power to the lamp.

The examiner fails to show a teaching or suggestion of the limitations in the prior art. Although Yamashita discloses supplying a low frequency "AC voltage of a rectangular waveform", col. 4, ll. 64-65, to a discharge lamp and, after a time, supplying a higher frequency AC voltage of a rectangular waveform thereto, the low frequency waveform is

not supplied immediately after the lamp is activated. To the contrary, the reference teaches that the low frequency waveform is supplied before the lamp is activated. Specifically, "[i]t is apparent from the above that the lighting frequency controller **30** outputs a rectangular wave signal having the reference frequency  $f_2 (< f_1)$  before the lamp **10** is activated, and outputs a rectangular wave signal having the reference frequency  $f_1$  after the activation of the lamp **10**. This scheme is employed to prevent the relationship between the phase of the rectangular wave voltage supplied to the lamp **10** and the generation timing for the start pulse as much as possible." Col. 7, ll. 47-51.

Relying on Leyten only to teach "that by increasing the current level at the start this will minimize the need for re-ignition", (Examiner's Answer at 7), the examiner fails to allege, let alone show, that the reference cures the deficiency of Yamashita. Because Yamashita supplies its low frequency waveform to its lamp before the lamp is activated, we are not persuaded that teachings from the prior art

anticipate or would have suggested the limitations to "supply a first alternating-current electric power to the discharge lamp during a time interval immediately after activation of the discharge lamp, ... supply a second alternating-current electric power to the discharge lamp after the time interval elapses; wherein the second alternating-current electric power has a frequency higher than a frequency of the first alternating-current electric power." Therefore, we reverse the rejection of claims 11-18 as anticipated by Yamashita and the rejection of claims 11-18 as obvious over Yamashita in view of Leyten.

Claims 9 and 10

The appellants no longer contest the rejection of claims 9 and 10. "[T]he main purpose of the examination, to which every application is subjected, is to try to make sure that what each claim defines is patentable. [T]he name of the game is the claim ....'" In re Hiniker Co., 150 F.3d 1362, 1369, 47 USPQ2d 1523, 1529 (Fed. Cir. 1998) (quoting Giles S. Rich, The Extent of the Protection and Interpretation of Claims--American Perspectives, 21 Int'l Rev. Indus. Prop. &

Copyright L. 497, 499, 501 (1990)). "In the patentability context, claims are to be given their broadest reasonable interpretations. Moreover, limitations are not to be read into the claims from the specification."

In re Van Geuns, 988 F.2d 1181, 1184, 26 USPQ2d 1057, 1059 (Fed. Cir. 1993)(citing In re Zletz, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989)).

Here, claims 9 and 10 specify in pertinent part the following limitations: "first means connected to the starting switch for feeding an alternating current of a variable frequency to the discharge lamp after the starting switch moves into the on position; and second means connected to the first means for increasing the frequency of the alternating current in accordance with lapse of time over an interval of time during which the discharge lamp remains activated." Giving the claims their broadest reasonable interpretation, and "[c]ontrary to the earlier positions taken by Appellants, Appellants now agree with the Examiner's holding that in claim 9, the first AC power is not limited to being applied to the lamp after lamp activation." (Reply Br. at 4.) At oral

hearing, furthermore, the appellants' counsel admitted that claims 9 and 10, as written, are anticipated by Yamashita. We are not persuaded that the examiner erred in so rejecting claims 9 and 10. Therefore, we affirm pro forma the rejection. Arguments not made in the briefs are not before us, are not at issue, and are considered waived.

Also at the oral hearing, the counsel proposed amending claims 9 and 10 to replace the phrase "after the starting switch moves into the on position" with the phrase --after activation of the discharge lamp--. We advised the counsel that the Board of Patent Appeals and Interferences has no jurisdiction to consider the proposed amendment; such jurisdiction resides with the Examiner. If the Examiner enters the amendment, however, we are persuaded that the claims would distinguish over Yamashita.

#### CONCLUSION

In summary, the rejection of claims 9 and 10 under 35 U.S.C. § 102(e) as anticipated by Yamashita is affirmed. The rejection of claims 11-18 under § 102(e) as anticipated by

Yamashita is reversed. The rejection of claims 11-18 under 35 U.S.C. § 103 as obvious over Yamashita is also reversed, as is the rejection of claim 16 under § 103 as obvious over Yamashita in view of Leyten. Accordingly, we affirm-in-part.

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

AFFIRMED-IN-PART

MICHAEL R. FLEMING	)	
Administrative Patent Judge	)	
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	)	
	)	BOARD OF PATENT
JOSEPH F. RUGGIERO	)	APPEALS
Administrative Patent Judge	)	AND
	)	INTERFERENCES
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LANCE LEONARD BARRY	)	
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