

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

Paper No. 24

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

---

Ex parte LOUIS B. PORZILLI

---

Appeal No. 2001-0913  
Application No. 09/002,058

---

ON BRIEF

---

Before HAIRSTON, FLEMING, and RUGGIERO, Administrative Patent Judges.  
HAIRSTON, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 1 through 34. In an Amendment After Final (paper number 17), claims 6, 28<sup>1</sup> and 33 were amended.

The disclosed invention relates to an acoustic wave enhancing means coupled to the resonant chamber of a stringed instrument to selectively enhance only the acoustic waves of a lower portion of a range of frequencies.

---

<sup>1</sup> Based upon the amendment, the indefiniteness rejection of claims 6 and 28 was withdrawn (paper numbers 19 and 20).

Claim 1 is the only independent claim on appeal, and it reads as follows:

1. A string instrument comprising:

a first body having a resonant chamber;

a plurality of strings each manifesting a tone of a different frequency secured to and external to the body and over the chamber for producing first acoustical waves in a range of frequencies, the chamber exhibiting second acoustic waves in a range of frequencies responsive to and corresponding to the first waves; and

acoustic wave enhancing means coupled to the body and to the chamber for selectively enhancing only the acoustic waves of the lower portion of the range of frequencies of the second waves.

The references relied on by the examiner are:

Dunham	1,303,466	May 13, 1919
Kalaf	1,455,916	May 23, 1923
Redlinger <sup>2</sup>	1,635,502	Jul. 12, 1927
Pedersen	1,721,710	Jul. 23, 1929
Newton	2,953,052	Sep. 20, 1960
Doschek	3,101,810	Aug. 27, 1963
Desmond	3,524,377	Aug. 18, 1970
Kasha	4,079,654	Mar. 21, 1978
McGill	5,780,758	Jul. 14, 1998
		(effective filing date Aug. 11, 1994)
de Cristofaro <sup>3</sup> (French Patent Application)	FR 370, 137	Jan. 29, 1907

---

<sup>2</sup> Although this reference is not listed in the prior art of record (answer, page 4), it is relied on by the examiner to reject several claims on appeal (answer, pages 5 and 6).

<sup>3</sup> A copy of the translation of this reference is attached.

Appeal No. 2001-0913  
Application No. 09/002,058

Claims 27 and 34 stand rejected under the second paragraph of 35 U.S.C. § 112 for indefiniteness.

Claims 1, 8, 13 through 15, 19 through 22 and 31 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over de Cristofaro in view of Pedersen.

Claims 2, 4, 24, 25, 29 and 32 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over de Cristofaro in view of Pedersen and Kalaf.

Claims 3 and 5 through 7 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over de Cristofaro in view of Pedersen, Kalaf and Doschek.

Claims 9 through 11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over de Cristofaro in view Pedersen and Redlinger.

Claim 12 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over de Cristofaro in view of Pedersen, Redlinger and Kasha.

Claims 16 and 17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over de Cristofaro in view of Pedersen and Desmond.

Claim 18 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over de Cristofaro in view of Pedersen, Desmond and Newton.

Claims 23 and 28 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over de Cristofaro in view of Pedersen and appellant's admitted prior art.

Claim 26 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over de Cristofaro in view of Pedersen, Kalaf and McGill.

Appeal No. 2001-0913  
Application No. 09/002,058

Claim 30 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over de Cristofaro in view of Pedersen and Kasha.

Claim 33 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over de Cristofaro in view of Pedersen and Dunham.

Reference is made to the final rejection (paper number 8), the briefs (paper numbers 18 and 21) and the answer (paper number 20) for the respective positions of the appellant and the examiner.

#### OPINION

We have carefully considered the entire record before us, and we will reverse all of the rejections of record.

Turning first as we must to the indefiniteness rejection, the examiner indicates (final rejection, page 8) that claims 27 and 34 are indefinite because “it is unclear what is meant by the phrase ‘traditional instrument’ as recited in line 1 of claims 27 and 34,” and because of the presence of “the recitation of ‘a traditional instrument’ having a ‘first body’ and a ‘second body’ in lines 1-3 of claim 27, and in lines 1-4 of claim 34.” According to the examiner (final rejection, page 8), “it is unknown how the ‘instrument’ has two ‘bodies.’” Appellant argues (brief, page 24) that:

Claim 27 merely states that a traditional instrument has a second body of a given depth greater than the first body. This is not complex or confusing. It is a mere statement of fact. The claim does not state the same instrument has both bodies. This is a preamble recitation and would be understood as such by one of ordinary skill. Claims are directed to one of ordinary skill who would understand the plain ordinary meaning of garden variety English. The claim states that the second body of a traditional instrument has a given depth greater than the first body (which is claimed in claim 1). The specification at page 11, line 23 to page 12, line 17, explains in detail what is meant by traditional instrument. Claims are not to be read

in a vacuum but in light of the specification. The specification explains what is meant by a traditional instrument.

Although appellant's claim style of contrasting the conventional/traditional instrument with the wave enhancing means of his invention is not exactly a model of clarity, when claims 27 and 34 are read in light of the disclosure, however, we are of the opinion that the skilled artisan would understand the contrast being made between the traditional instrument and appellant's disclosed and claimed instrument. In other words, the skilled artisan would know the metes and bounds of appellant's contribution to the stringed instrument art. Accordingly, the indefiniteness rejection of claims 27 and 34 is reversed.

Turning next to the obviousness rejection of claim 1, appellant has not presented a challenge to the examiner's findings concerning the teachings of Pedersen, and the use of this reference in conjunction with the teachings of de Cristofaro. Instead, the appellant has challenged the examiner's findings concerning the sound bar teachings of de Cristofaro. Appellant argues (brief, page 26) that sound bar e in de Cristofaro is used to reinforce the sound board b, and that it is not used for low frequency enhancement. Appellant additionally argues (brief, page 27) that:

The assertion of enhanced loudness is not based on scientific evidence, is not based on known acoustic principles and is erroneous unbelievable subjective impression not based on modern technology. There is no enhancement of acoustic waves in this French document in only the lower portion of the acoustic frequency spectrum as claimed in claim 1.

We agree with appellant's arguments that de Cristofaro is completely silent as to use of the sound bar e for the purpose listed by the examiner in the rejection. Thus, the obviousness rejection of

Appeal No. 2001-0913  
Application No. 09/002,058

claim 1 is reversed because the examiner's obviousness determination must be "based on evidence of record," and not the examiner's "subjective belief and unknown authority." In re Lee, 277 F.3d 1338, 1343-44, 61 USPQ2d 1430, 1434 (Fed. Cir. 2002).

The obviousness rejections of claims 2 through 26 and 28 through 33 are likewise reversed because none of the other references of record cures the noted shortcoming in the teachings of de Cristofaro.

#### DECISION

The decision of the examiner rejecting claims 27 and 34 under the second paragraph of 35 U.S.C. § 112, and claims 1 through 26 and 28 through 33 under 35 U.S.C. § 103(a) is reversed.

#### REVERSED

Appeal No. 2001-0913  
Application No. 09/002,058

KENNETH W. HAIRSTON  
Administrative Patent Judge

MICHAEL R. FLEMING  
Administrative Patent Judge

JOSEPH F. RUGGIERO  
Administrative Patent Judge

)  
)  
)  
)  
)  
) BOARD OF PATENT  
) APPEALS  
) AND  
) INTERFERENCES  
)  
)  
)  
)  
)

KWH/lp

Appeal No. 2001-0913  
Application No. 09/002,058

LOUIS B. PERZILLI  
164 WEST SHORE TRAIL  
SPARTA, NJ 07871

***Letty***

**JUDGE HAIRSTON**

**APPEAL NO. 2001-0913**

**APPLICATION NO. 09/002,058**

**APJ HAIRSTON**

**APJ RUGGIERO**

**APJ FLEMING**

**DECISION: REVERSED**

**PREPARED: Sep 26, 2003**

**OB/HD**

**PALM**

**ACTS 2**

**DISK (FOIA)**

**REPORT**

**BOOK**