

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* THOMAS P. WARNER

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Appeal 2008-0782  
Application 10/730,678  
Technology Center 3700

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Decided: May 7, 2008

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Before WILLIAM F. PATE, III, TERRY J. OWENS, and BIBHU R.  
MOHANTY, *Administrative Patent Judges*.

MOHANTY, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

The Appellant seeks our review under 35 U.S.C. § 134 of the final rejection of claims 1, 4-5, 7-18, 20, 22, and 24-30. Claims 2-3, 6, 19, 21, and 23 have been canceled. We have jurisdiction under 35 U.S.C. § 6(b) (2002). We REVERSE.

## THE INVENTION

The Appellants' claimed invention is directed to a system and method of remotely controlling devices, such as dental instruments. The system includes a foot pedal having a moveable member and an associated transmitter. The transmitter transmits a first signal in response to partial displacement of the moveable member when a first device is selected, and a second signal when a second device is selected. (Specification, 1-2). Claim 1 reproduced below is representative of the subject matter of appeal.

1. A system for remotely controlling devices, comprising:
  - a foot pedal unit having a moveable member;
  - a first microprocessor operatively associated with the foot pedal unit and an RF transmitter, the first microprocessor configured to determine whether at least a first device or a second device is selected, the first microprocessor further configured to induce the RF transmitter to transmit a first RF signal in response to at least partial displacement of the moveable member when the first device is selected, the first RF signal having a first identifier value, the first microprocessor further configured to induce the RF transmitter to transmit a second signal in response to at least partial displacement of the moveable member when the second device is selected, the second RF signal having a second identifier value; and
  - a first device actuation unit configured to receive the first RF signal, the first device actuation unit further configured to compare the first identifier value to a first predetermined value associated with the first device, the first device actuation unit further configured to actuate the first device when the first identifier value corresponds to the first predetermined value.

### THE REJECTIONS

The Examiner relies upon the following as evidence in support of the rejections:

Jones	US 4,114,275	Sep. 19, 1978
Murry	US 4,156,187	May 22, 1979
Nash	US 4,171,572	Oct. 23, 1979
Beier (Beier '126)	US 4,305,126	Dec. 8, 1981
Beier (Beier '681)	US 4,571,681	Feb. 18, 1986
Fornoff	US 5,931,669	Aug. 3, 1999

The following rejections are before us for review:

1. Claims 1, 4-5, 7, 12-17, 20, 22, 24-26, and 28 are rejected under 35 U.S.C. § 103(a) as unpatentable over Beier '681, Murry, and Beier '126.
2. Claims 8-11 are rejected under 35 U.S.C. § 103(a) as unpatentable over Beier '681, Murry, Beier '126, and Jones.
3. Claims 18 and 27 are rejected under 35 U.S.C. § 103(a) as unpatentable over Beier '681, Murry, Beier '126, and Fornoff.
4. Claims 29 and 30 are rejected under 35 U.S.C. § 103(a) as unpatentable over Beier '681, Murry, Beier '126, and Nash.

## FINDINGS OF FACT

We find the following enumerated findings of fact are supported at least by a preponderance of the evidence<sup>1</sup>:

1. Beier '681 discloses a switching device for dental instruments. The device uses switches 1, 2, 3, 4 which are opened when the associated instrument (I-IV) is withdrawn from its holder (Col. 3:34-38).
2. Beier '681 discloses that the control component 12 transmits a voltage signal of between 1 and 10 volts to provide the operating signals for the instruments (Col. 2:45-56).
3. Beier '681 discloses that a foot pedal is used to select the output control voltage (Col. 3:9-14).
4. Murry discloses an ultrasonic transducer 291 that emits first 293, second 294, and third 295 frequencies to control separate devices 297, 298, and 299 (Fig. 14)
5. Beier '126 discloses a dental treatment installation that uses a control device 100 (Fig. 1).
6. Jones discloses a diaphragm 21 operated switch 70 connected to a foot pedal device 20 (Figs. 3 and 9).
7. Farnoff discloses a dental device with image acquiring instruments (Col. 3:16-22).
8. Nash discloses a dental handpiece with a light source extinguished at a predetermined period of time (Abstract).

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<sup>1</sup> See *Ethicon, Inc. v. Quigg*, 849 F.2d 1422, 1427 (Fed. Cir. 1988) (explaining the general evidentiary standard for proceedings before the Patent Office).

## PRINCIPLES OF LAW

“Section 103 forbids issuance of a patent when ‘the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.’” *KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1734 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including (1) the scope and content of the prior art, (2) any differences between the claimed subject matter and the prior art, (3) the level of skill in the art, and (4) where in evidence, so-called secondary considerations. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18, (1966). *See also KSR*, 127 S.Ct. at 1734 (“While the sequence of these questions might be reordered in any particular case, the [*Graham*] factors continue to define the inquiry that controls.”)

## ANALYSIS

The Appellant argues that the rejection of independent claims 1 and 22 as unpatentable over Beier ‘168, Murry, and Beier ‘126 is improper because there is no motivation to combine references. Specifically, the Appellant argues that since Murry does not teach including transmitting any information for variably controlling operation (e.g., speed) of the instruments, such a combination of the references “would destroy the intended functionality of Beier ‘681, because the instruments could not be variably controlled” (Br. 8). The Appellant also argues that the proposed combination of Beier ‘681, Murry, and Beier ‘126 does not provide any

teaching of “the first microprocessor further configured to induce the RF transmitter to transmit a second signal in response to at least partial displacement of the moveable member when the second device is selected” (Br. 10-11).

We agree. Beier ‘168 discloses a switching arrangement for control of dental instruments which is based on the associated instrument being withdrawn from its holder (FF 1). Beier ‘168 also discloses control of the associated instrument by the use of a foot pedal arrangement (FF 3). Murry discloses an ultrasonic transducer which acts as a “radio frequency (RF) transmitter” to switch between devices (FF 4). Beier ‘681 discloses the use of a conventional microprocessor (FF 5) in a dental treatment apparatus.

Claim 1 contains limitations for “the first microprocessor further configured to induce the RF transmitter to transmit a second signal in response to at least partial displacement of the moveable member when the second device is selected” and claim 22 contains similar limitations. The proposed modification using Murry’s disclosed “RF transmitter” would require the foot pedal (the moveable member) in Beier ‘168 to be used to select an instrument, and not enable it to control speed. As such, one of ordinary skill in the art would not see a motivation or benefit to make such a combination because it would not allow the foot pedal to be used for speed control for the device, and a prima facie case of obviousness has not been established.

For the reasons above, we will not sustain the rejection of claims 1 and 22. As the rejection of dependent claims 4-5, 7, 12-17, 20, 24-26 and 28, fails to cure the deficiency of the independent base claims 1 and 22, we will not sustain the rejection of these claims as well.

The rejection of claims 8-11 under 35 U.S.C. § 103(a) as unpatentable under Beier '681, Murry, Beier '126 and Jones fails to establish a prima facie case of obviousness, because such a combination would not allow the foot pedal to be used for speed control for the reasons addressed above. For these reasons, we will not sustain the rejection of claims 8-11.

The rejection of claims 18 and 27 under 35 U.S.C. § 103(a) as unpatentable under Beier '681, Murry, Beier '126 and Fornoff fails to establish a prima facie case of obviousness, because such a combination would not allow the foot pedal to be used for speed control for the reasons addressed above. For these reasons, we do not sustain the rejection of claims 18 and 27.

The rejection of claims 29 and 30 under 35 U.S.C. § 103(a) as unpatentable under Beier '681, Murry, Beier '126 and Nash fails to establish a prima facie case of obviousness, because such a combination would not allow the foot pedal to be used for speed control for the reasons addressed above. For these reasons, we do not sustain the rejection of claim 29 and 30.

#### CONCLUSIONS OF LAW

We conclude that Appellant has shown that the Examiner erred in rejecting claims 1, 4-5, 7, 12-17, 20, 22, 24-26, and 28 under 35 U.S.C. § 103(a) as unpatentable over Beier '681, Murry, and Beier '126.

We conclude that Appellant has shown that the Examiner erred in rejecting claims 8-11 under 35 U.S.C. § 103(a) as unpatentable over Beier '681, Murry, Beier '126, and Jones.

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We conclude that Appellant has shown that the Examiner erred in rejecting claims 18 and 27 under 35 U.S.C. § 103(a) as unpatentable over Beier '681, Murry, Beier '126 and Fornoff.

We conclude that Appellant has shown that the Examiner erred in rejecting claims 29 and 30 under 35 U.S.C. § 103(a) as unpatentable over Beier '681, Murry, and Beier '126, and Nash.

#### DECISION

The Examiner's rejection of claims 1, 4-5, 7-18, 20, 22, and 24-30 is reversed.

REVERSED

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