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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte AIMEE KATHLEEN GREENING,
ROBERT G. HOWARD, and
GIUSEPPE AMBROSI

Appeal 2020-000328
Application 15/100,027
Technology Center 3600

Before MURRIEL E. CRAWFORD, NINA L. MEDLOCK, and
PHILIP J. HOFFMANN, *Administrative Patent Judges*.

HOFFMANN, *Administrative Patent Judge*.

DECISION ON APPEAL
STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant¹ appeals from the
Examiner’s rejection of claims 1–20. We have jurisdiction under 35 U.S.C.
§ 6(b).

We REVERSE.

¹ We use the word “Appellant” to refer to “applicant” as defined in
37 C.F.R. § 1.42. Appellant identifies the real party in interest as
Halliburton Energy Services, Inc. Appeal Br. 3.

According to Appellant, the “disclosure relates generally to equipment utilized and operations performed in conjunction with a subterranean well[,] and . . . more particularly provides a bypass system and method for use with a fluidic oscillator downhole.” Spec. 1, ll. 10–14. Claims 1, 8, and 15 are the independent claims on appeal. Below, we reproduce independent claim 1 as illustrative of the appealed claims.

1. A fluidic oscillator assembly for use in a subterranean well, the assembly comprising:
 - a fluidic oscillator comprising a plurality of intersecting fluid paths formed in a structure between an inlet of the fluidic oscillator and an outlet of the fluidic oscillator, wherein flowing fluid through the fluidic oscillator produces oscillations in the fluid; and
 - a closure that in a first position prevents fluid flow through the fluidic oscillator to an exterior of the assembly, and in a second position permits fluid flow through the fluidic oscillator to the exterior of the assembly.

REJECTION AND PRIOR ART

The Examiner rejects claims 1–20 under 35 U.S.C. § 103 as unpatentable over Tschirky² and Fripp.³

ANALYSIS

As set forth above, independent claim 1 recites, in relevant part, that the fluidic oscillator assembly includes “a fluidic oscillator comprising a plurality of intersecting fluid paths formed in a structure between an inlet of the fluidic oscillator and an outlet of the fluidic oscillator, wherein flowing fluid through the fluidic oscillator produces oscillations in the fluid.”

² Tschirky et al., US 3,989,114, issued Nov. 2, 1976 (“Tschirky”).

³ Fripp et al., US 2011/0042092 A1, published Feb. 24, 2011 (“Fripp”).

Appeal Br., Claims App. The Examiner relies on Tschirky to disclose the claimed fluidic oscillator (albeit without the claimed plurality of intersecting fluid paths.) *See, e.g.*, Answer 3–4; *see* Final Action 2–4. According to the Examiner, it would have been obvious to modify Tschirky’s fluidic oscillator to include Fripp’s plurality of intersecting fluid paths. *See* Final Action 3–4.

In particular, the Examiner relies on Tschirky’s element “15” to disclose the claimed fluidic oscillator. *See id.* Tschirky identifies element 15 as a “port” bored in housing 3. *See, e.g.*, Tschirky col. 3, ll. 31–33. Appellant argues that the Examiner’s rejection is in error because Tschirky does not disclose a fluidic oscillator. *See, e.g.*, Appeal Br. 11. Based on our review of the record, we do not sustain the Examiner’s obviousness rejection of independent claim 1 because the Examiner does not support adequately that Tschirky’s port 15 and/or housing 3 disclose a fluidic oscillator.

As stated above, Tschirky names the structures under discussion as “port” 15 and “housing” 3. *See, e.g.*, Tschirky col. 3, ll. 31–33. Neither name informs us that the structures are “fluidic oscillators.” Appeal Br., Claims App. (Claim 1). To the extent that the Examiner further explains how Tschirky’s port 15 and housing 3 disclose the claimed fluidic oscillator, the Examiner states the following:

To the [E]xaminer’s understanding, . . . [the claim term] would encompass the structure of Tschirky . . . [which] provid[es] a fluidic system where flow may occur or may not occur, via a controlled action, thus providing a fluidic oscillation, and therefore the structures which provide or even merely

accommodate such action would be considered . . . [the claimed] “fluidic oscillator.”

Answer 3. This is inadequate to support the rejection. Without additional explanation or evidence from the Examiner, we disagree with the Examiner that because fluid flow may be permitted and prevented through Tschirky’s port 15 and housing 3, these structures therefore disclose the claimed fluidic oscillator. Further, even if we agreed with the Examiner that Tschirky’s port 15 and housing 3 may be operated as the Examiner states—i.e., “to provid[e] a fluidic system where flow may occur or may not occur, via a controlled action”—and that such operation would disclose the claimed fluidic oscillator, the Examiner still inadequately supports the rejection. This is because the Examiner does not establish either that Tschirky provides the Examiner-described flow by any such “controlled action,” and does not establish that it would have been obvious to control Tschirky’s structure as the Examiner states. Although we do not precisely delineate the scope of the claim term “fluidic oscillator,” more than the ability to turn flow on and off through a structure is required for the structure to disclose a “fluidic oscillator.”

Accordingly, we do not sustain the Examiner’s obviousness rejection of independent claim 1. We also do not sustain the Examiner’s obviousness rejection of independent claims 8 and 15 that include a similar recitation as, and the Examiner rejects with, claim 1. Further, we do not sustain the Examiner’s obviousness rejection of claims 2–7, 9–14, and 16–20 that depend from the independent claims.

CONCLUSION

We REVERSE the Examiner’s § 103 rejection of claims 1–20.

Appeal 2020-000328
Application 15/100,027

In summary:

Claims Rejected	35 U.S.C. §	Basis/Reference(s)	Affirmed	Reversed
1-20	103	Tschirky, Fripp		1-20

REVERSED