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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* JEFFREY RAYMOND GUEBLE, DAVID SULLIVAN, and  
JEVNE BRANDEN MICHEAU-CUNNINGHAM

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Appeal 2019-004437  
Application 14/717,631  
Technology Center 2800

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Before DEBRA L. DENNETT, LILAN REN, and  
MERRELL C. CASHION JR., *Administrative Patent Judges.*

REN, *Administrative Patent Judge.*

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant<sup>1</sup> appeals from the Examiner's decision to reject claims 1, 3, and 4. *See* Final Act. 3, 6. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

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<sup>1</sup> 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 "Zetec, Inc. a division of Roper Technologies, Inc." Appeal Br. 3.

### CLAIMED SUBJECT MATTER

“The invention is directed to sensor probes for eddy current non-destructive testing.” Spec. 1:10. Claim 1, reproduced below, is illustrative of the claimed subject matter:

1. An eddy current probe for nondestructive testing of tubular structures made of electrically conductive materials comprising:
  - a plurality of eddy current drive coils;
  - a plurality of eddy current sensors;
  - a first multiplexer that receives eddy current signals from said plurality of eddy current sensors;
  - an analog to digital converter that receives multiplexed eddy current signals from said first multiplexer and converts said multiplexed eddy current signals to a multiplexed eddy current digital signal; and
  - a digital to analog converter that receives digital drive signals and converts said digital drive signals to a plurality of analog excitation signals for driving said plurality of drive coils via a second multiplexer, *wherein said plurality of analog excitation signals are arranged in time slots, each time slot having a configuration defined by a length, a plurality of frequency components, and relative amplitude of each of the plurality of frequency components.*

Claims Appendix (Appeal Br. 11) (emphasis added).

### REFERENCES

The prior art references relied upon by the Examiner are:

Name	Reference	Date
Ammar	US 2007/0040615 A1	Feb. 22, 2007
Crouch	US 2007/0126422 A1	June 7, 2007
Harada	US 2010/0231210 A1	Sept. 16, 2010
Drummy	US 2012/0265491 A1	Oct. 18, 2012

## REJECTIONS

Claims 1 and 4 are rejected under 35 U.S.C. § 103 as unpatentable over Harada and further in view of Drummy. Final Act. 3.

Claim 3 is rejected under 35 U.S.C. § 103 as unpatentable over Harada in view of Drummy, and further in view of Crouch. Final Act. 6.

## OPINION

We review the appealed rejections for error based upon the issues identified by Appellant and in light of the arguments and evidence produced thereon. *Cf. Ex parte Frye*, 2010 WL 889747, \*4 (BPAI 2010) (precedential) (cited with approval in *In re Jung*, 637 F.3d 1356, 1365 (Fed. Cir. 2011) (“[I]t has long been the Board’s practice to require an applicant to identify the alleged error in the examiner’s rejections.”)). After having considered the evidence presented in this Appeal and each of Appellant’s contentions, we are not persuaded that Appellant identifies reversible error, and we affirm the Examiner’s § 103 rejections for the reasons expressed in the Final Office Action and the Answer. We add the following primarily for emphasis.

*Claim 1*<sup>2</sup>

The Examiner finds that each of Harada and Drummy disclose an eddy current probe having the recited structural components is known in the art – in particular, Drummy which also describes both an analog to digital converter and a digital to analog converter in a non-destructive eddy current inspection instrument. Final Act. 3–5; Ans. 4, 6. Appellant does not dispute these findings. *See* Appeal Br. 5–8.

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<sup>2</sup> Appellant does not separately argue claim 4 and claim 4 stands or falls with claim 1. *See* Appeal Br. 5–8; *see also* 37 C.F.R. § 41.37(c)(1)(vii).

The Examiner finds that, given the structural identity, the prior art digital-to-analog converter is capable of performing identical functions including convert[ing] “digital drive signals to a plurality of analog excitation signals” with the recited characteristics. Final Act. 3 (citing Ammar as evidence that it is well-known in the art that a digital-to-analog converter is a time-sampled system); Ans. 4. The Examiner further finds that Harada describes “a plurality of analog excitation signals” with the recited characteristics and a skilled artisan would have combined Drummy’s converters with Harada’s teaching to arrive at the apparatus recited in claim 1. Ans. 5–6 (citing, among others, Harada ¶¶ 79, 96, and Figs. 5, 6A–6B and Drummy ¶ 62, and Figs. 3, 6).

Appellant does not address the portions of Harada and Drummy cited by the Examiner in support of the rejection. *See* Appeal Br. 5–8. Appellant instead argues that the Examiner reversibly erred because the cited portion of Ammar does not teach a plurality of analog excitation signals with the recited characteristics. *Id.* at 6.

Appellant’s argument is unpersuasive for several reasons. First and foremost, the argument does not address Harada and Drummy which serve as basis for the rejection. *See* Appeal Br. 5–8. As Appellant acknowledges, Ammar “is not cited as a reference in the actual claim rejection.” *Id.* at 6. The Examiner instead refers to Ammar in the Final Rejection to respond to Appellant’s argument. Final Act. 2–3 (explaining that that Ammar shows that the prior art apparatus is capable of converting digital signals to analog ones with the recited characteristics).

Appellant’s argument is not persuasive also because it does not structurally distinguish the apparatus claim from the prior art apparatus.

“[A]pparatus claims cover what a device *is*, not what a device *does*.” *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1468 (Fed. Cir. 1990). Appellant’s argument that “a digital to analog converter (DAC) produces whatever output based on the digital input to the converter. The output is not inherent, but a function of the digital signal sent to the converter, typically by a processor” does not structurally distinguish the recited apparatus. Appeal Br. 6. The argument is in fact consistent with the Examiner’s finding that the prior art converter is capable of outputting the recited analog signal – when the prior art converter is operated to receive the corresponding input signal.

Lastly, Appellant’s argument is not persuasive because it does not address the Examiner’s analysis and illustrations that a skilled artisan would have arrived at claim 1 based on the combined teaching of Harada and Drummy. *See* Ans. 6–7. For example, the Examiner illustrates first, second, and third time slots for an analog signal applying Drummy Figure 6. *Id.* at 7. The Examiner’s findings are supported by the record and Appellant’s argument does not identify error therein. The rejection of claim 1 is sustained.

### *Claim 3*

Appellant does not separately argue the rejection of claim 3. *See* Appeal Br. 8 (arguing only that “Crouch does not remedy these deficiencies” in Harada and Drummy). The rejection of claim 3 is sustained for the reasons provided with regard to claim 1. *See* 37 C.F.R. § 41.37(c)(1)(vii).

## CONCLUSION

The Examiner’s rejections are affirmed.

More specifically,

DECISION SUMMARY

<b>Claims Rejected</b>	<b>35 U.S.C. §</b>	<b>Reference(s)/Basis</b>	<b>Affirmed</b>	<b>Reversed</b>
1, 4	103	Harada, Drummy	1, 4	
3	103	Harada, Drummy, Crouch	3	
<b>Overall Outcome:</b>			1, 3, 4	

TIME PERIOD FOR RESPONSE

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED