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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
95/001,482	11/11/2010	7,397,431	9749.003.IP431	6101
25883 7590 12/13/2010 HOWISON & ARNOTT, L.L.P P.O. BOX 741715			EXAMINER	
			MENEFEE, JAMES A	
DALLAS, TX	75374-1715		ART UNIT	PAPER NUMBER
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:			MAIL DATE	DELIVERY MODE
			12/13/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.





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(THIRD PARTY REQUESTER'S CORRESPONDENCE ADDRESS)

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CHITTA' FIEXAMINATION UNIT

Transmittal of Communication to Third Party Requester Inter Partes Reexamination

REEXAMINATION CONTROL NUMBER 95/001,482.

PATENT NUMBER 7,397,431.

TECHNOLOGY CENTER 3999.

ART UNIT 3992.

Enclosed is a copy of the latest communication from the United States Patent and Trademark Office in the above-identified reexamination proceeding. 37 CFR 1.903.

Prior to the filing of a Notice of Appeal, each time the patent owner responds to this communication, the third party requester of the *inter partes* reexamination may once file written comments within a period of 30 days from the date of service of the patent owner's response. This 30-day time period is statutory (35 U.S.C. 314(b)(2)), and, as such, it <u>cannot</u> be extended. See also 37 CFR 1.947.

If an ex parte reexamination has been merged with the inter partes reexamination, no responsive submission by any ex parte third party requester is permitted.

All correspondence relating to this inter partes reexamination proceeding should be directed to the **Central Reexamination Unit** at the mail, FAX, or hand-carry addresses given at the end of the communication enclosed with this transmittal.



Control No.	Patent Under Reexamination		
95/001,482	7,397,431		
Examiner	Art Unit		
James Menefee	3992		

ORDER GRANTING/DENYING REQUEST FOR INTER PARTES REEXAMINATION -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address. --The request for inter partes reexamination has been considered. Identification of the claims, the references relied on, and the rationale supporting the determination are attached. ☑ PTO/SB/08 Attachment(s): ☐ PTO-892 Other: 1. The request for *inter partes* reexamination is GRANTED. An Office action is attached with this order. An Office action will follow in due course. 2. The request for *inter partes* reexamination is DENIED. This decision is not appealable. 35 U.S.C. 312(c). Requester may seek review of a denial by petition to the Director of the USPTO within ONE MONTH from the mailing date hereof. 37 CFR 1.927. EXTENSIONS OF TIME ONLY UNDER 37 CFR 1.183. In due course, a refund under 37 CFR 1.26(c) will be made to requester. All correspondence relating to this inter partes reexamination proceeding should be directed to the

Central Reexamination Unit at the mail, FAX, or hand-carry addresses given at the end of this Order.





Art Unit: 3992

ORDER GRANTING REEXAMINATION REQUEST

A substantial new question of patentability ("SNQ") affecting claims 1, 4-5, 7-8, 12-14, 17, 21-22, 24-27, and 29-31 of U.S. Patent No. 7,397,431 ("the '431 patent") is raised by the *inter partes* reexamination request filed 11/11/2010 ("Request"). The above claims will be reexamined. Reexamination was not requested of claims 2-3, 6, 9-11, 15-16, 18-20, 23, 28, and 32-37, therefore they will not be reexamined. See MPEP 2643. An Office action on the merits will follow in due course.

References Cited in Request

U.S. Patent No. 6,195,048 to Chiba et al. ("Chiba").

U.S. Patent No. 6,140,975 to Cohen ("Cohen").

JP 11-27042 to Serizawa ("Serizawa").

WO 99/27608 to Cohen ("Cohen-PCT").

Puente, Fractal Antennae, Ph.D. dissertation, Dept. Signal Theory and Communications, Universitat Politecnica de Catalunya, May 1997 ("Puente").

Puente et al., On the Behavior of the Sierpinski Multiband Fractal Antenna, IEEE Transactions on Antennas and Propagration, vol. 46 no. 4 (April 1998) ("Puente-IEEE").

Misra et al., "Experimental Investigations on the Impedance and Radiation . . ."

Microwave & Opt. Tech. Lett., vol. 11 no. 2 (Feb. 5, 1996) ("Misra").

Misra et al., "Study of Impedance and Radiation Properties of a Concentric Microstrip Triangular-Ring Antenna and Its Modeling Techniques Using FDTD Method," IEEE Transactions on Antennas and Propagation, vol. 46 no. 4 (April 1998) ("Misra-Chowdhury").



Discussion of the Patent and its Prosecution History

The '431 patent is drawn to multilevel antennae, which are described as antennae formed by sets of similar geometric elements (polygons or polyhedrons) electromagnetically coupled together so that one may distinguish each of the elements forming the structure, as well as the overall structure. Col. 1 lines 16-20. For example, each of the black triangle elements in Fig. 1 can be distinguished from the others, and the whole structure can be distinguished as well. It is stated that such antennae provide advantages of reduction in size and simultaneous operation in several bands. Col. 1 lines 21-24.

The '431 patent was filed with a preliminary amendment such that claims 40-87 were presented. The examiner issued a restriction requirement grouping the claims into ten inventions, and applicant elected with traverse the invention of claims 40-74 and 78-79. The first action on the merits was an *Ex parte Quayle* action indicating the elected claims as allowable and requiring cancellation of the non-elected claims. No reasons for allowance were given, and the examiner cited a few references as illustrating a similar structure to a multilevel assembly. Applicant complied with the requirement and cancelled the non-elected claims, resulting in a Notice of Allowance. The examiner stated reasons for allowance for claim 40 (issued claim 1, the only claim from the reasons that is at issue in this proceeding) as follows:

Claim 40 is allowable over the art of record because the prior art does not teach a multi-band antenna comprising the plurality of geometric elements including at least two portions, a first portion being associated with a first selected frequency band and a second portion being associated with a second selected frequency band, the second portion being located substantially within the first portion, the first and second portions defining empty spaces in an overall structure of the conductive radiating element to provide a circuitous current path within the first portion and within the second portion, the current within the first portion providing the first selected frequency band with radio electric behavior substantially similar to the radio electric behavior of the second selected frequency band and in combination with the remaining claimed limitations.



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