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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/418,947	04/18/2003	Li Chen	D025/069987-026	9263
29391	7590	08/31/2004	EXAMINER	
BEUSSE BROWNLEE WOLTER MORA & MAIRE, P. A. 390 NORTH ORANGE AVENUE SUITE 2500 ORLANDO, FL 32801			VANNUCCI, JAMES	
			ART UNIT	PAPER NUMBER
			2828	

DATE MAILED: 08/31/2004

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

AK

Office Action Summary	Application No. 10/418,947	Applicant(s) CHEN, LI	
	Examiner Jim Vannucci	Art Unit 2828	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 18 April 2003.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-24 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) 17-24 is/are allowed.
- 6) Claim(s) 1,2,10,13,15 and 16 is/are rejected.
- 7) Claim(s) 3-9,11,12 and 14 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 18 August 2003 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8-18-03.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2, 10, 13 and 15-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Kitchener(5,757,333).

Claim 1, figure 4 discloses top(upper conductor) and bottom(lower conductor) parallel vertically-spaced apart planar elements with the top element having first(top) and second(bottom) parallel edges and the bottom element having first(top) and second(bottom) parallel edges, the first edge of the top element and the first edge of the bottom element are vertically aligned, and the second edge of the top element extends beyond the second edge of the bottom element, the second edge of the top element is connected to a source terminal(310), a side planar element(31) disposed perpendicular to the top element and the bottom element is connected to the first edge of the top element and the first edge of the bottom element, and a meander line conductor(311) with a first end for connecting to a ground plane(fig. 5; no. 41) and a second end connected to the second edge of the bottom element.

Claim 2, the bottom element and the side element disclosed in figure 4 radiate and receive electromagnetic energy.

Claims 10 and 16, figure 5 discloses a ground plane(41) parallel to the top element and connected to the first end of the meander line conductor.

Claim 13, since the lengths are not random the length of the bottom element relative to the length of the top element was determined in response to desired frequency response characteristics of the antenna.

Claim 15, figure 4 discloses a short leg planar element(lower conductor), a long leg planar element(upper conductor), an intermediate leg planar element connecting the long leg element and the short leg element(31), an elongated meander line conductor(311) having a first end connected to a free end of the short leg element and having a second end comprising the ground terminal, and the free end of the long leg element comprises the source terminal(310).

Allowable Subject Matter

3. Claims 3-9, 11-12 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
4. Claims 17-24 are allowed.
5. The following is a statement of reasons for the indication of allowable subject matter. The following limitations are primarily responsible for distinguishing the above claims over the prior art.

Regarding claims 3-6, the limitations concerning a terminal end of the short leg comprising the second end of the meander line conductor, and the short leg extending

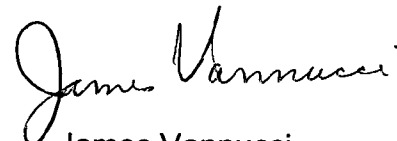
upward from the bottom element in the direction of the top element, and the long leg extending proximate along and spaced apart from the top element; regarding claim 7, the limitations concerning a notch formed in the second edge of the bottom element wherein the notch comprises a notch edge substantially parallel to the second edge of the bottom element, and wherein the second end of the meander line conductor is connected to the notch edge; regarding claims 8-9, the limitations concerning the second edge of the top element comprising a tapered edge such that a width of the top element narrows in a direction away from the first edge of the top element; regarding claims 11-12, the limitations concerning the top element extending beyond the ground plane; regarding claim 14, the limitations concerning the top element comprising a rectangular region and a triangular region wherein the first edge of the top element forms an edge of the rectangular region and the second edge of the top element forms an edge of the triangular region; and regarding claims 17-24, the limitations concerning a third element disposed substantially perpendicular to the first edge of the first substrate and extending above the first substrate, wherein the third element is electrically connected to the first element and to the terminal end of the meander line conductor.

Correspondence

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Jim Vannucci whose phone number is (571) 272-1820.

Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center whose telephone number is (703) 308-0956.

Papers related to Technology Center 2800 applications only may be submitted to Technology Center 2800 by facsimile transmission. Any transmission not to be considered an official response must be clearly marked "DRAFT". The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The Technology Center Fax Center number is (703) 872-9306.


James Vannucci