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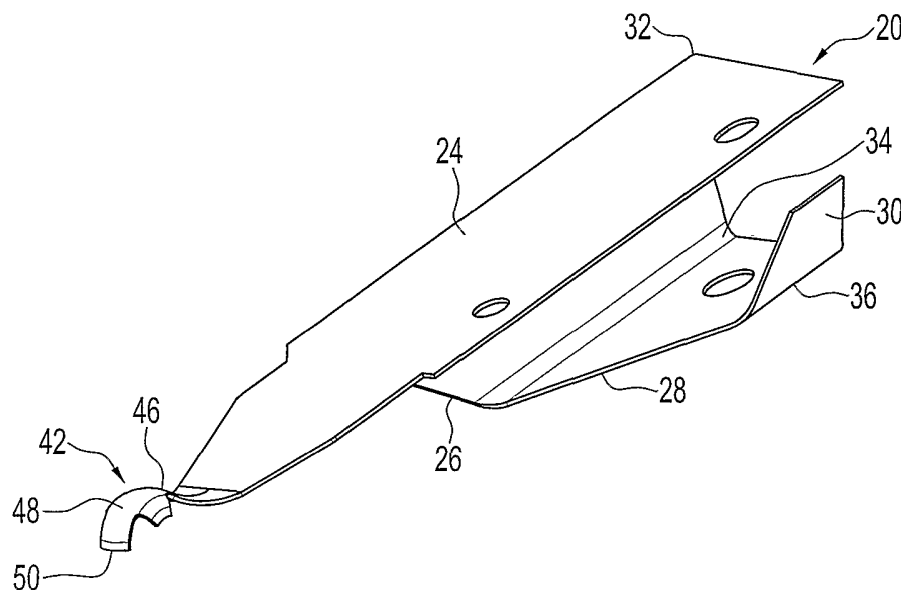
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(54) Title: MULTIPLE BAND ANTENNA AND ANTENNA ASSEMBLY



(57) Abstract: Multiple band antenna (20) for mounting to a portable device. The antenna comprises a piece of conductive metal including a half-bowtie portion shaped to define a monopole and folded to provide a plurality of planar surfaces (24, 26, 28, 30) together generally enclosing a volume. A flexible spring contact (42) extends from the half-bowtie portion. The spring contact is configured for engaging a contact of the portable device.

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# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US05/18223

## A. CLASSIFICATION OF SUBJECT MATTER

IPC: **H01Q 1/24**( 2006.01)

USPC: 343/702

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 343/702,700MS

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
NONE

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
Please See Continuation Sheet

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category *        | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No.                      |
|-------------------|------------------------------------------------------------------------------------|--------------------------------------------|
| X,E<br>---<br>Y,E | US 6,917,334 B2 (CHEN) 12 July 2005 (12.07.2005), see entire document.             | 20<br>-----<br>1-6,9-13,16,18,19           |
| Y<br>---<br>A     | US 6,140,966 A (PANINAH) 31 October 2000 (31.10.2000), see entire document.        | 1-6,9-13,16,18,19<br>-----<br>7,8,14,15,17 |



Further documents are listed in the continuation of Box C.



See patent family annex.

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later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X"

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# INTERNATIONAL SEARCH REPORT

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## Continuation of B. FIELDS SEARCHED Item 3:

USPGPUB, USPAT, EPO, JPO, DERWENT, IBM\_TDB search terms: zhijun with zhang, jean with langer, rob with sutter, tony with kfoury, antenna and bowtie, (bowtie with antenna) same (well adj3 known), (bowtie with antenna) with (improv\$4), (bowtie with antenna with half), (triang\$5 with antenna)