

ASSIGNMENT
(Joint-Executive Order)

WHEREAS, we, **DAVID DA-WEI LIU, PAUL H. CARR and STEVEN D. MITTLEMAN**, while employed by the Government of the United States, made an invention entitled **THREE DIMENSIONAL RECONFIGURABLE PHOTOCONDUCTIVE ANTENNA ARRAY ELEMENT** and described in application for Letters Patent of the United States executed by us on the 18th day of August, 1997 on the 8th day of August, 1997 and on the 17th day of August, 1997

WHEREAS, the conditions under which said invention was made are such as to entitle the Government under paragraph l(a) of Executive Order 10096, to the entire right, title and interest therein, including foreign rights; and

WHEREAS, as to foreign rights, it is the policy of the Government to obtain an option to exercise such rights;

NOW, THEREFORE, to all whom it may concern, be it known that for and in consideration of the premises and other valuable considerations, we, the inventors, have sold, assigned and transferred and by these presents do sell, assign and transfer unto the Government of the United States of America as represented by the Secretary of the Air Force, our entire right, title and interest throughout the world, in and to the aforesaid invention described in the aforesaid application for Letters Patent of the United States, and all Letters Patent issuing thereon and any continuations, divisions and reissues or extensions thereof; we hereby authorize and request the Commissioner of Patents and Trademarks to issue said Letters Patent to the Government of the United States of America, as represented by the Secretary of the Air Force, and his/her successors, as assignee of our entire right, title and interest in and to the same throughout the United States of America, its territories and dependencies, for the sole use for the full term or terms for which said Letters Patent and any continuations, divisions and reissues or extensions thereof are, or may be granted as fully and entirely as the same would have been held by us, the inventors, had this assignment not been made; and we do hereby also grant unto the Government of the United States as represented by the Secretary of the Air Force, our right, title, and interest in said invention or all applications for Letters Patent thereon in all countries foreign to the United States in which the Government of the

United States may file, or cause to be filed, applications for Letters Patent, without payment to us of any further consideration; provided, however, that this grant to take foreign rights in our invention, or application for Letters Patent thereon, shall have force and effect only as to such applications filed in foreign countries, and that all foreign rights not exercised under this grant are left to us subject to a nonexclusive, irrevocable, royalty-free license to the Government of the United States in any patent which may issue on said invention in any foreign country, including the power to issue sublicenses for use in behalf of the Government of the United States and/or in furtherance of the foreign policies of the Government of the United States; and we, the inventors, hereby agree to execute any and all applications for Letters Patent, and to furnish all data and documents and to execute any papers which may be necessary for the preparation of filing of such applications, or for the Government to exercise its option granted hereunder, except that it shall be understood that we shall not be subject to any out-of-pocket expense relative to such action.

Inventor David Da-Wei Liu
DAVID DA-WEI LIU

STATE OF: New Hampshire
COUNTY OF Hillsborough ^{ss:}

Before me, a Notary Public in and for the county of Hillsborough and state of New Hampshire, on this 16 day of August, 1997, personally appeared **DAVID DA-WEI LIU** to me known personally, who being duly sworn did say that he is one of the inventors who signed the above instrument and acknowledges said instrument to be his free act and deed.

Doreen A. Manetta
Notary Public

DOREEN A. MANETTA, Notary Public
My Commission Expires November 10, 1999

(Seal)

Inventor

Paul H. Carr

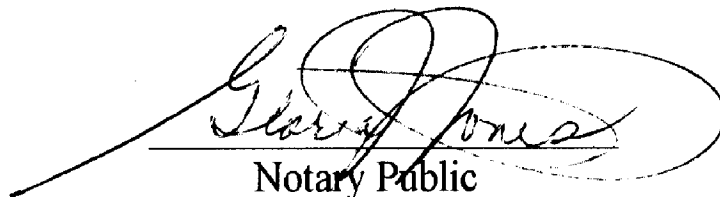
PAUL H. CARR

STATE OF MASSACHUSETTS_:

SS:

COUNTY OF MIDDLESEX

Before me, a Notary Public in and for the county of Middlesex and state of Massachusetts, on this 8th day of August, 19 97, personally appeared **PAUL H. CARR** to me known personally, who being duly sworn did say that he is one of the inventors who signed the above instrument and acknowledges said instrument to be his free act and deed.


Notary Public

My Commission Expires 7 September 2001

(Seal)

Inventor *St. D. Mittleman*
STEVEN D. MITTLEMAN

STATE OF: *Massachusetts*

SS:
COUNTY OF: *Middlesex*

Before me, a Notary Public in and for the county of *Middlesex* and state of *Massachusetts*, on this *11th* day of *August*, 19 *97*, personally appeared **STEVEN D. MITTLEMAN** to me known personally, who being duly sworn did say that he is one of the inventors who signed the above instrument and acknowledges said instrument to be his free act and deed

Steven D. Jones
Notary Public

My Commission Expires 7 September 2001

(Seal)