

PATENT ASSIGNMENT

Electronic Version v1.1

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SUBMISSION TYPE:	NEW ASSIGNMENT						
NATURE OF CONVEYANCE:	ASSIGNMENT						
CONVEYING PARTY DATA							
<table border="1"><thead><tr><th>Name</th><th>Execution Date</th></tr></thead><tbody><tr><td>Delmar L. Barker</td><td>11/21/2008</td></tr><tr><td>William R. Owens</td><td>11/21/2008</td></tr></tbody></table>	Name	Execution Date	Delmar L. Barker	11/21/2008	William R. Owens	11/21/2008	
Name	Execution Date						
Delmar L. Barker	11/21/2008						
William R. Owens	11/21/2008						
RECEIVING PARTY DATA							
Name:	Raytheon Company						
Street Address:	870 Winter Street						
City:	Waltham						
State/Country:	MASSACHUSETTS						
Postal Code:	02451-1449						
PROPERTY NUMBERS Total: 1							
<table border="1"><thead><tr><th>Property Type</th><th>Number</th></tr></thead><tbody><tr><td>Application Number:</td><td>12328962</td></tr></tbody></table>	Property Type	Number	Application Number:	12328962			
Property Type	Number						
Application Number:	12328962						
CORRESPONDENCE DATA							
Fax Number:	(480)994-9025						
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>							
Phone:	480-994-9888						
Email:	dnoblitt@ngtechlaw.com						
Correspondent Name:	THE NOBLITT GROUP, PLLC						
Address Line 1:	4800 NORTH SCOTTSDALE ROAD						
Address Line 2:	SUITE 6000						
Address Line 4:	SCOTTSDALE, ARIZONA 85251						
ATTORNEY DOCKET NUMBER:	RAYTI.8800						
NAME OF SUBMITTER:	Daniel J. Noblitt						
Total Attachments: 3 source=RAYTI.8800_2008-12-05_assignment FINAL#page1.tif source=RAYTI.8800_2008-12-05_assignment FINAL#page2.tif							

OP \$40.00 12328962

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PATENT
REEL: 021930 FRAME: 0584

ASSIGNMENT

WHEREAS, each undersigned inventor (hereinafter "ASSIGNOR") of the address indicated below, is an inventor of "HEAT TRANSFER DEVICES BASED ON THERMODYNAMIC CYCLING OF A PHOTONIC CRYSTAL WITH COUPLED RESONANT DEFECT CAVITIES" for which an application for Letters Patent of the United States will be filed;

AND WHEREAS, Raytheon Company (hereinafter "ASSIGNEE"), an entity having its principal place of business and mailing address at 870 Winter Street, Waltham, Massachusetts 02451-1449 is desirous of memorializing its interest therein;

NOW, THEREFORE, the undersigned ASSIGNOR hereby confirms ASSIGNEE owns the invention as described in the aforesaid application. Nonetheless, to comport with Patent and Trademark Office procedures, ASSIGNOR memorializes that transfer in the form of this assignment and;

THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, ASSIGNOR by these presents does sell, assign, and transfer unto ASSIGNEE, its successors, assigns and legal representatives, the ASSIGNOR's full and exclusive right to the invention as described in the aforesaid application, in the United States and all foreign countries, together with any related applications or rights, including any provisional, nonprovisional, continuation, continuation-in-part, divisional, reissue, reexamination, foreign, PCT, or other patent application or like document or right, and any right of priority under the International Convention for the Protection of Industrial Property, Inter-American Convention Relating to Patents, Designs and Industrial Models, and any other international agreements to which the United States adheres, and hereby authorizes and requests the Commissioner of Patents to issue any Letters Patent issuing from or claiming priority to said application to ASSIGNEE, for the sole use and benefit of ASSIGNEE, its successors, assigns and legal representatives,

AND HEREBY AGREES to transfer a like interest upon request of ASSIGNEE, its successors, assigns and legal representatives, and without further remuneration, in and to any improvements and continuing applications for patents based thereon, growing out of or relating to the invention; and to provide all reasonable assistance and execute any papers deemed essential by ASSIGNEE, its successors, assigns and legal representatives, to ASSIGNEE's full protection and title in and to the invention hereby transferred,

AGREEING, FURTHERMORE, upon request of ASSIGNEE, and without further remuneration, to execute any and all papers desired by ASSIGNEE for the filing and granting of foreign applications and the perfecting of title thereto in ASSIGNEE.

EXECUTED as of the date written below by ASSIGNOR:

Inventor: Delmar L. Barker

Signature: Delmar Barker

Date: Nov 21/08

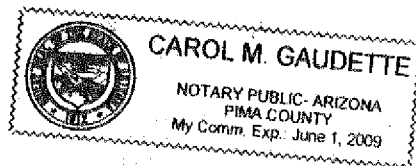
Residence address: 6650 W. Sweetwater, Tucson, Arizona 85745

STATE OF Arizona)
COUNTY OF Pima) ss.

On this 21st day of November, 2008, before me, a notary public in and for said county, appeared Delmar L. Barker, who is known to me to be the same person whose name is subscribed to the foregoing instrument, and s/he acknowledges that s/he signed, sealed and delivered the said instrument as a free and voluntary act for the uses and purposes therein set forth.

(Seal)

Carol M. Gaudette
Notary Public



Inventor: William R. Owens

Signature: *William R. Owens* Date: 21 Nov 2008

Residence address: 9763 E. McAndrew Ct. Tucson, Arizona 85748

STATE OF Arizona)
) ss.
COUNTY OF Pima)

On this 21st day of November, 2008, before me, a notary public in and for said county, appeared William R. Owens, who is known to me to be the same person whose name is subscribed to the foregoing instrument, and s/he acknowledges that s/he signed, sealed and delivered the said instrument as a free and voluntary act for the uses and purposes therein set forth.

(Seal)

Carol M. Gaudette
Notary Public

