

FORM PTO-1619A  
Expires 06/30/99  
OMB 0651-0027

07-14-2000

U.S. Department of Commerce  
Patent and Trademark Office  
**PATENT**



101403557

Re  
JUL 19 PM 3:28  
COPY/FINANCE

**RECORDATION FORM COVER SHEET  
PATENTS ONLY**

TO: The Commissioner of Patents and Trademarks: Please record the attached original document(s) or copy(ies).

**Submission Type** 6-19-00

**Conveyance Type**

- New
- Resubmission (Non-Recordation)  
Document ID# \_\_\_\_\_
- Correction of PTO Error  
Reel # \_\_\_\_\_ Frame # \_\_\_\_\_
- Corrective Document  
Reel # \_\_\_\_\_ Frame # \_\_\_\_\_

- Assignment
  - License
  - Merger
  - Security Agreement
  - Change of Name
  - Other (SEE ATTACHED)
- U.S. Government**  
(For Use ONLY by U.S. Government Agencies)
- Departmental File     Secret File

**Conveying Party(ies)**

Mark if additional names of conveying parties attached

Name (line 1)	HE Holdings, Inc. dba Hughes Electronics	Execution Date	Month Day Year
			12 17 1997
Name (line 2)	a corporation of Delaware		

**Second Party**

Name (line 1)	_____	Execution Date	Month Day Year
Name (line 2)	_____		

**Receiving Party**

Mark if additional names of receiving parties attached

If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

Name (line 1)	Raytheon Company		
Name (line 2)	a corporation of Delaware		
Address (line 1)	Office of the General Counsel		
Address (line 2)	141 Spring Street		
Address (line 3)	Lexington	Massachusetts	02421
	<small>City</small>	<small>State/Country</small>	<small>Zip Code</small>

**Domestic Representative Name and Address**

Enter for the first Receiving Party only.

Name	_____
Address (line 1)	_____
Address (line 2)	_____
Address (line 3)	_____
Address (line 4)	_____

07/13/2000 00000005 500616 5214922 FOR OFFICE USE ONLY  
01 FC:581 40.00 CH

Public burden reporting for this collection of information is estimated to average approximately 30 minutes per Cover Sheet to be recorded, including time for reviewing the document and gathering the data needed to complete the Cover Sheet. Send comments regarding this burden estimate to the U.S. Patent and Trademark Office, Chief Information Officer, Washington, D.C. 20231 and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Paperwork Reduction Project (0651-0027), Washington, D.C. 20503. See OMB Information Collection Budget Package 0651-0027, Patent and Trademark Assignment Practice. DO NOT SEND REQUESTS TO RECORD ASSIGNMENT DOCUMENTS TO THIS ADDRESS.

Mail documents to be recorded with required cover sheet(s) information to:  
Commissioner of Patents and Trademarks, Box Assignments, Washington, D.C. 20231 90572:he/rayth/correct

Attachment(s)

**PATENT**  
**REEL: 010909 FRAME: 0006**

**Correspondent Name and Address** Area Code and Telephone Number

Name

Address (line 1)

Address (line 2)

Address (line 3)

Address (line 4)

**Pages** Enter the total number of pages of the attached conveyance document including any attachments. #

**Application Number(s) or Patent Number(s)**  Mark if additional numbers attached

Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).

Patent Application Number(s)			Patent Number(s)		
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="5214922"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

If this document is being filed together with a new Patent Application, enter the date the patent application was signed by the first named executing inventor. Month Day Year

**Patent Cooperation Treaty (PCT)**

Enter PCT application number only if a U.S. Application Number has not been assigned.

PCT <input type="text"/>	PCT <input type="text"/>	PCT <input type="text"/>
PCT <input type="text"/>	PCT <input type="text"/>	PCT <input type="text"/>

**Number of Properties** Enter the total number of properties involved. #

**Fee Amount** Fee Amount for Properties Listed (37 CFR 3.41): \$

Method of Payment: Enclosed  Deposit Account

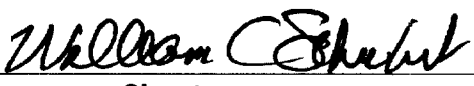
(Enter for payment by deposit account or if additional fees can be charged to the account.)

Deposit Account Number: #

Authorization to charge additional fees: Yes  No

**Statement and Signature**

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. Charges to deposit account are authorized, as indicated herein.

William C. Schubert 

Name of Person Signing Signature Date

90572:he/rayth/correct

Attachment

02/07/00

FORM PTO-1619A  
Expires 06/30/99  
OMB 0651-0027

U.S. Department of Commerce  
Patent and Trademark Office  
**PATENT**

~~03-14-2000~~



101287930

RM COVER SHEET  
IS ONLY

TO: The Commissioner of Patents and Trademarks: Please record the attached original document(s) or copy(ies).

**Submission Type**

**New**

**Resubmission (Non-Recordation)**  
Document ID#

**Correction of PTO Error**  
Reel #  Frame #

**Corrective Document**  
Reel #  Frame #

**Conveyance Type**

**Assignment**       **Security Agreement**

**License**             **Change of Name**

**Merger**               **Other**

**U.S. Government**  
(For Use ONLY by U.S. Government Agencies)

**Departmental File**       **Secret File**

**Conveying Party(ies)**

Mark if additional names of conveying parties attached      Execution Date  
Month Day Year

Name (line 1)

12171997

Name (line 2)

**Second Party**

Execution Date  
Month Day Year

Name (line 1)

Name (line 2)

**Receiving Party**

Mark if additional names of receiving parties attached

If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

Name (line 1)

Name (line 2)

Address (line 1)

Address (line 2)

Address (line 3)     
City State/Country Zip Code

**Domestic Representative Name and Address**

Enter for the first Receiving Party only.

Name

Address (line 1)

Address (line 2)

Address (line 3)

Address (line 4)

**FOR OFFICE USE ONLY**

03/13/2000 VBROWN 00000066 500616 5214992

01 FC:581 (40.00 CH)

Public burden reporting for this collection of information is estimated to average approximately 30 minutes per Cover Sheet to be recorded, including time for reviewing the document and gathering the data needed to complete the Cover Sheet. Send comments regarding this burden estimate to the U.S. Patent and Trademark Office, Chief Information Officer, Washington, D.C. 20231 and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Paperwork Reduction Project (0651-0027), Washington, D.C. 20503. See OMB Information Collection Budget Package 0651-0027, Patent and Trademark Assignment Practice. DO NOT SEND REQUESTS TO RECORD ASSIGNMENT DOCUMENTS TO THIS ADDRESS.

Mail documents to be recorded with required cover sheet(s) information to:  
Commissioner of Patents and Trademarks, Box Assignments, Washington, D.C. 20231

90572:he/ra

Attachment(s)

**PATENT**  
REEL: 010909 FRAME: 0008

FEB

**Correspondent Name and Address**

Area Code and Telephone Number **8055622108**

Name **Ravtheon Company**

Address (line 1) **Intellectual Property & Licensing, EO/E01/E150**

Address (line 2) **2000 East El Segundo Boulevard**

Address (line 3) **P. O. Box 902**

Address (line 4) **El Segundo, California 90245-0902**

**Pages**

Enter the total number of pages of the attached conveyance document including any attachments. # **3**

**Application Number(s) or Patent Number(s)**

Mark if additional numbers attached

Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).

**Patent Application Number(s)**

**Patent Number(s)**


<b>5214992</b>		

If this document is being filed together with a new Patent Application, enter the date the patent application was signed by the first named executing inventor. Month Day Year

**Patent Cooperation Treaty (PCT)**

Enter PCT application number only if a U.S. Application Number has not been assigned.

PCT		PCT		PCT	
PCT		PCT		PCT	

**Number of Properties**

Enter the total number of properties involved. # **1**

**Fee Amount**

Fee Amount for Properties Listed (37 CFR 3.41): \$ **40**

Method of Payment:  
Deposit Account

Enclosed  Deposit Account

(Enter for payment by deposit account or if additional fees can be charged to the account.)

Deposit Account Number: # **500616**

Authorization to charge additional fees: Yes  No

**Statement and Signature**

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. Charges to deposit account are authorized, as indicated herein.

**William C. Schubert**

*William C Schubert*

**02-03-00**

Name of Person Signing

Signature

Date

90572:he/ray

Attachment

CERTIFICATE OF MERGER

OF

RAYTHEON COMPANY

WITH AND INTO

HE HOLDINGS, INC.

Under Section 251

of

the Delaware General Corporation Law

THE UNDERSIGNED, HE Holdings, Inc. ("Defense") and Raytheon Company ("Raytheon"), in connection with the merger of Raytheon with and into Defense (the "Merger"), hereby certify as follows:

FIRST: The name and the state of incorporation of each of the constituent corporations are:

<u>Name</u>	<u>State of Incorporation</u>
HE Holdings, Inc.	Delaware
Raytheon Company	Delaware

SECOND: An agreement and plan of merger relating to the Merger (the "Agreement of Merger") has been approved, adopted, certified, executed and acknowledged by each of the constituent corporations in accordance with Section 251 of the Delaware General Corporation Law.

THIRD: The name of the surviving corporation of the Merger is HE Holdings, Inc.

FOURTH: The Certificate of Incorporation of the surviving corporation shall be the Amended and Restated Certificate of Incorporation of HE Holdings, Inc. as filed with the Secretary of State of Delaware on December 12, 1997; provided, however, that Article I thereof shall be amended and restated as of the effectiveness of the Merger to read as follows:

Article I  
Name

The name of the corporation (which is hereafter referred to as the "Corporation") is Raytheon Company.

FIFTH: The merger shall be effective at and as of 5:00 p.m. (Eastern Time) on December 17, 1997.

SIXTH: The executed Agreement of Merger is on file at the principal place of business of the surviving corporation at 141 Spring Street, Lexington, Massachusetts 02173. *at (46)*

SEVENTH: A copy of the Agreement of Merger will be furnished by the surviving corporation, on request and without cost, to any stockholder of either constituent corporation.

IN WITNESS WHEREOF, the undersigned corporations have duly executed this Certificate this 17th day of December 1997.

RAYTHEON COMPANY

By: Thomas D. Hyde  
Name: THOMAS D. HYDE  
Title: VICE PRESIDENT AND GENERAL COUNSEL

HE HOLDINGS, INC.

By: J. L. Williamson  
Name: J. L. WILLIAMSON  
Title: ASSIST. SECRETARY

State of Delaware  
Office of the Secretary of State

---

I, EDWARD J. FREEL, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF MERGER, WHICH MERGES:

"RAYTHEON COMPANY", A DELAWARE CORPORATION,

WITH AND INTO "HE HOLDINGS, INC." UNDER THE NAME OF

"RAYTHEON COMPANY", A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, AS RECEIVED AND FILED IN THIS OFFICE THE SEVENTEENTH DAY OF DECEMBER, A.D. 1997, AT 3:20 O'CLOCK P.M.



A handwritten signature in cursive script, reading "Edward J. Freel".

Edward J. Freel, Secretary of State

0472015 8100M

981109838

AUTHENTICATION: 8985779

DATE: 03-23-98

PATENT  
REEL: 010909 FRAME: 0012



**UNITED STATES DEPARTMENT OF COMMERCE**  
**Patent and Trademark Office**  
 ASSISTANT SECRETARY AND COMMISSIONER  
 OF PATENTS AND TRADEMARKS  
 Washington, D.C. 20231

MAY 09, 2000 . MAY 23 2000

PTAS



\*101287930A\*

RAYTHEON COMPANY  
 WILLIAM C. SCHUBERT  
 INTELLECTUAL PROP. & LIC., EO/E01/E150  
 2000 EAST EL SEGUNDO BLVD., P.O. BOX 902  
 EL SEGUNDO, CA 90245-0902

**UNITED STATES PATENT AND TRADEMARK OFFICE**  
**NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT**

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 02/07/2000

REEL/FRAME: 010602/0148  
 NUMBER OF PAGES: 5

BRIEF: MERGER (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

HE HOLDINGS, INC. DBA HUGHES  
 ELECTRONICS

DOC DATE: 12/17/1997

ASSIGNEE:

RAYTHEON COMPANY  
 141 SPRING STREET  
 OFFICE OF THE GENERAL COUNSEL  
 LEXINGTON, MASSACHUSETTS 02421

COPY

SERIAL NUMBER: 07645195  
 PATENT NUMBER: 5214992

FILING DATE: 01/24/1991  
 ISSUE DATE: 06/01/1993

KIMBERLY WHITE, EXAMINER  
 ASSIGNMENT DIVISION  
 OFFICE OF PUBLIC RECORDS

Raytheon distribution:  
 Assignment Division, USPTO, w/atmtts  
 6/15/00--to correct error

**PATENT**  
**REEL: 010909 FRAME: 0013**



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WITH AND INTO

HE HOLDINGS, INC.

Under Section 251

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Title: VICE PRESIDENT AND GENERAL COUNSEL

HE HOLDINGS, INC.

By: J. L. Williamson  
Name: J. L. WILLIAMSON  
Title: ASST. SECRETARY

State of Delaware  
Office of the Secretary of State

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Edward J. Freel, Secretary of State

0472015 8100M

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AUTHENTICATION: 8985779

DATE: 03-23-98

PATENT

RECORDED: 06/19/2000

REEL: 010909 FRAME: 0016