# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4020925

| SUBMISSION TYPE:      | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT     |

#### **CONVEYING PARTY DATA**

| Name                | Execution Date |
|---------------------|----------------|
| STEPHEN ROY GILBERT | 08/23/2016     |
| RICHARD C. RUBY     | 08/23/2016     |

#### **RECEIVING PARTY DATA**

| Name:           | AVAGO TECHNOLOGIES GENERAL IP (SINGAPORE) PTE. LTD. |  |  |
|-----------------|---|--|--|
| Street Address: | NO. 1 YISHUN AVENUE 7                               |  |  |
| City:           | SINGAPORE   |  |  |
| State/Country:  | SINGAPORE   |  |  |
| Postal Code:    | 768923  |  |  |

## **PROPERTY NUMBERS Total: 1**

| Property Type       | Number   |  |
|---------------------|----------|--|
| Application Number: | 15245392 |  |

#### **CORRESPONDENCE DATA**

**Fax Number:** (571)283-0740

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

**Phone:** 5712830729

**Email:** jbooth@volentine.com

Correspondent Name: AVAGO TECHNOLOGIES, LTD.

Address Line 1: 4380 ZIEGLER ROAD

Address Line 4: FORT COLLINS, COLORADO 80525

| ATTORNEY DOCKET NUMBER: | 160254US01   |
|-------------------------|--------------|
| NAME OF SUBMITTER:      | JANE BOOTH   |
| SIGNATURE:              | /jane booth/ |
| DATE SIGNED:            | 08/24/2016   |

#### **Total Attachments: 2**

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PATENT 503974269 REEL: 039521 FRAME: 0602

Avago File No.: 160254US01

### ASSIGNMENT OF PATENT APPLICATION

| WHEREAS, I am an inventor or joint inventor of an Invention entitled:  |
|--|
| SURFACE ACOUSTIC WAVE (SAW) RESONATOR HAVING TRAP-RICH REGION ,  |
| which Invention is described and claimed in a United States patent application filed 24 August 2016 as US application serial number 15/245,392 (the Application); and  |
| WHEREAS, Avago Technologies General IP (Singapore) Pte. Ltd. (Company Registration No. 200512430D), a company incorporated under the laws of Singapore whose registered office is at No. 1 Yishun Avenue 7, Singapore 768923 (hereinafter AVAGO), desires to acquire the Invention and the Application, and any patent that may be granted therefor in the United States and in any foreign countries.   |
| NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I hereby sell, assign, convey and transfer to AVAGO, its successors and assigns, the entire right, title and interest, in and to the Invention and the Application and all other applications for patent which have been or shall be filed in the United States and all foreign countries for the Invention, and all continuations, continuations-in-part, divisionals, renewals and substitutes therefore, and all the rights and privileges under any and all patents that may be granted therefore including any reissues, reexaminations and extensions thereof. |
| I authorize AVAGO to make applications for patent or other form of protection for the Invention in AVAGO's own name in any and all countries, and to invoke and claim the benefit of all rights of priority provided by any and all treaties, conventions or agreements without further written or oral authorization.   |
| I agree to communicate to AVAGO or to its nominee all known facts respecting the Invention, to testify in any legal proceedings, to execute all oaths, declarations, assignments, powers of attorney and other papers, and generally to do all acts which may be necessary, desirable or convenient for securing and maintaining patents or other forms of protection for the Invention in any and all countries and for vesting title thereto in AVAGO, its successors and assigns, in any and all countries provided the expenses which may be incurred by me in lending such cooperation and assistance are paid by AVAGO;  |
| I hereby authorize and request the Patent and Trademark Office officials in the United States and in any foreign countries to issue any and all patents, inventor's certificates, utility certificates, utility models, or certificates of addition for the Invention to AVAGO as assignee of the entire interest.   |
| I hereby covenant that I have full right to convey the entire interest herein assigned, and that I have not executed and will not execute any agreement in conflict herewith.  |
| I hereby grant AVAGO attorneys the power to insert on this document any further information necessary or desirable to comply with the rules of the United States Patent and Trademark Office.  |
| IN WITNESS WHEREOF, executed by me on the date below.  |
| INVENTOR   |
| Name: Stephen Roy Gilbert Date: 8/23/2016  |
| Signature: MARM  |

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Additional inventors listed on supplemental page.

# Supplemental Page to Assignment of Patent Application Additional Inventors

| INVENTOR   |                 |          | <i>)</i>  |
|------------|-----------------|----------|-----------|
| Name:      | Richard C. Ruby | _ Date:  | 8/23/2016 |
| Signature: | JUL 17          | _        | / /       |
| INVENTOR   |                 |          |           |
| Name:      |                 | _ Date:  |           |
| Signature: |                 | _        |           |
| INVENTOR   |                 |          |           |
| Name:      |                 | _ Date:  |           |
| Signature: |                 | -        |           |
| INVENTOR   |                 |          |           |
| Name:      |                 | _ Date:  |           |
| Signature: |                 | <u>.</u> |           |
| INVENTOR   |                 |          |           |
| Name:      |                 | _ Date:  |           |
| Signature: |                 | <b>-</b> |           |
| INVENTOR   |                 |          |           |
| Name:      |                 | Date:    |           |
| Signature: |                 | -        |           |
| INVENTOR   |                 |          |           |
| Name:      |                 | _ Date:  |           |
| Signature: |                 | _        |           |

Assignment of Patent Application- US

**RECORDED: 08/24/2016** 

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PATENT REEL: 039521 FRAME: 0604