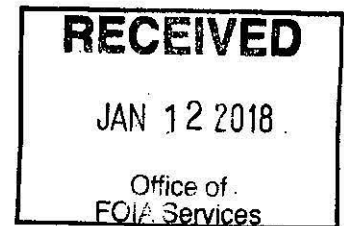


FOIA / PA Officer John Livornese  
U.S. Securities & Exchange Commission  
FOIA Office  
100 F Street NE, Mail Stop 5100  
Washington, DC 20549



January 12, 2018

Dear Mr. Livornese:

I request pursuant to the Freedom of Information Act (FOIA) 5 U.S.C. § 552. As Amended by Public Law No. 104-231, 110 Stat. 3048, copies of the following agreement, based on the **CT Order File No. 333-193552 - CF#30608**.

Exhibit 10.35 to Form S-1 filed on 01/24/2014 by Resonant Inc.

Exhibit Title: Amended And Restated Development Agreement

CIK: 1579910

RoyaltyStat will pay up to \$61 for research, copies and review fees for all of the abovementioned agreements. Please forward all releasable material for copying. My daytime telephone number is 202-798-8809. Please call me or e-mail at [accounts@royaltystat.com](mailto:accounts@royaltystat.com) to discuss the total cost or estimated cost of this research/copies should the amount exceed the price indicated in this request.

Sincerely,

RoyaltyStat LLC  
6931 Arlington Rd. # 580  
Bethesda, MD 20814



UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
STATION PLACE  
100 F STREET, NE  
WASHINGTON, DC 20549-2465

Office of FOIA Services

February 21, 2018

Ms. Marcia Coutinho  
RoyaltyStat, LLC  
6931 Arlington Road, Suite 580  
Bethesda, MD 20814

RE: Freedom of Information Act (FOIA), 5 U.S.C. § 552  
Request No. 18-01922-E

Dear Ms. Coutinho:

This letter is in response to your request, dated and received in this office on January 12, 2018, for Exhibit 10.35 to Form S-1, filed on January 24, 2014, by Resonant, Inc.

The search for responsive records has resulted in the retrieval of 18 pages of records that may be responsive to your request. They are being provided to you with this letter.

If you have any questions, please contact me at [fultonc@sec.gov](mailto:fultonc@sec.gov) or (202) 551-8186. You may also contact me at [foiapa@sec.gov](mailto:foiapa@sec.gov) or (202) 551-7900. You also have the right to seek assistance from Lizzette Katilius as a FOIA Public Liaison or contact the Office of Government Information Services (OGIS) for dispute resolution services. OGIS can be reached at 1-877-684-6448 or [Archives.gov](http://Archives.gov) or via e-mail at [ogis@nara.gov](mailto:ogis@nara.gov).

Sincerely,

A handwritten signature in cursive script that reads "Charlotte Fulton".

Charlotte Fulton  
FOIA Research Specialist

Enclosure



## AMENDED AND RESTATED DEVELOPMENT AGREEMENT

This Amended and Restated Development Agreement (the "**Agreement**") is entered into as of May, 8 2013 (the "**New Effective Date**") by, on the one hand, **Skyworks Solutions, Inc.** ("**Skyworks**"), including its wholly-owned subsidiaries, and, on the other hand, Resonant LLC, a California limited liability company ("**Resonant**"). Skyworks and Resonant are each a disclosing party(ies) ("**Discloser(s)**") and a receiving party(ies) ("**Recipient(s)**") of Confidential Information under this Agreement, and each may be referred to individually as a "**party**" and collectively as the "**parties**".

A. Skyworks is in the business of designing and distributing high reliability analog and mixed signal semiconductor technologies which support a variety of industries.

B. Superconductor Technologies, Inc. ("**STI**") has developed novel acoustic wave filter design technology (the "**Filter Technology**") which it desires to commercialize. STI initially planned to contribute the Filter Technology to Resonant Inc., a Delaware corporation ("**Old Resonant**"), for commercialization. STI later decided instead to use a limited liability company and contributed the Filter Technology to Resonant.

C. On February 3, 2012 (the "**Original Effective Date**"), Skyworks, STI and Old Resonant entered into a Development Agreement (the "**Original Agreement**") to allow the Parties to develop Duplexers (as defined below), for incorporation into Skyworks cellular terminal front-end module ("**FEM**") products (the "**Development Project**").

D. On July 6, 2012, STI contributed the Filter Technology and all of its rights and obligations under the Original Agreement to Resonant in exchange for a minority interest in Resonant. Resonant has the exclusive right and sole responsibility to further develop and commercialize the Filter Technology. Skyworks consented to the transfer of the Original Agreement from Old Resonant to Resonant in a letter dated June 3, 2012.

E. The parties desire to enter into this Agreement to amend and restate the terms and conditions set forth in the Original Agreement.

NOW, THEREFORE, in consideration of the mutual promises contained herein, and for other good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, and intending to be legally bound, the parties hereby agree as follows:

1. **Definitions.** For purposes of this Agreement, the following capitalized terms shall have the meanings specified below.

"**Confidential Information**" means any information disclosed by any Discloser to any Recipient, in writing, orally or by inspection of tangible objects (including, without limitation, documents, prototypes, samples, plant and equipment), which is designated as "Confidential," "Proprietary" or some similar designation. Information communicated orally will be considered Confidential Information if such information is confirmed in writing as being Confidential Information within thirty (30) days after the initial disclosure. Confidential Information may also include information disclosed to a Recipient by third parties on behalf of a Discloser. All Proprietary Technology disclosed by Discloser shall be deemed Confidential Information of Discloser.

"**Proprietary Technology**" means any proprietary technology (including, without limitation, any and all products, components, parts, know-how, data, studies, research, materials, formulae, protocols, techniques, experimental work, inventions, discoveries, designs, drawings, concepts, procedures, methodologies, ideas, diagrams, documentation, specifications, operational data, models, prototypes, works of authorship and other non-public materials) developed or acquired by a party prior to the Original Effective Date or independently developed by such party during or after the term of this Agreement.

"**Intellectual Property Rights**" means, on a worldwide basis, all patents (including originals, divisionals, continuations, continuations-in-part, extensions, foreign applications, utility models and re-issues), patent applications,

copyrights (including all registrations and applications therefore), trade secrets, service marks, trademarks, trade names, trade dress, trademark applications, moral rights, and any and all other proprietary and intellectual property rights.

**"Duplexer"** means a finished duplexer component suitable for potential incorporation into a Skyworks FEM, which incorporates a Resonant Duplexer Die design realized on an acoustic wave substrate material. For clarity, during the development of the Duplexer, the term "Duplexer" includes such development-stage Duplexer even though it is not finished.

**"Duplexer Die"** means a finished, patterned Resonant duplexer die design realized on an acoustic wave substrate material suitable for potential incorporation into a Duplexer.

**"Selected Band"** means the band mutually agreed upon by the parties pursuant to this Agreement.

## 2. Development.

(a) Resonant and Skyworks shall each diligently perform the actions and tasks assigned to them respectively, and substantially on the schedule set forth on **Exhibit A** attached hereto. The schedule will commence on the earlier of October 1, 2013 or as soon as practicable following the closing of Resonant's private financing. If Resonant and Skyworks mutually agree, they may execute Statements of Work (each an **"SOW"**) to further supplement Exhibit A, including to describe (i) contributions of Proprietary Technology and other resources by each of Skyworks and Resonant; (ii) adjustments to the anticipated timing for completion of each milestone set forth on **Exhibit A** (each, a **"Milestone"**); (iii) adjustments to specifications and/or acceptance criteria for the Duplexer to be developed in connection with such Milestone; (iv) additional Milestones; and (v) any adjustments to funding commitments related to the Development Project set forth on **Exhibit B**. However, no such additional SOW is required or a condition to the obligations in this Agreement or as a condition to commencement of the Development Project, unless agreed mutually in an SOW. If an SOW is entered, each such SOW shall automatically be deemed attached to this Agreement as a supplement to **Exhibit A** upon execution thereof by Skyworks and Resonant without additional action required. Any such mutually executed SOW shall govern such aspects of the development process as specified therein and shall, to the extent stated expressly therein, supersede and replace specified terms of **Exhibit A**. Any amendments or revisions to any SOW that may be entered shall be mutually agreed to by the parties to the SOW in writing.

(b) Each of the parties agrees to be responsible for its own costs relating to its negotiation of and performance under this Agreement, except as may be expressly set forth in a mutually agreed to SOW.

(c) Within five (5) days following execution of this Agreement, Resonant and Skyworks shall each identify no less than two (2) representatives who will be dedicated to the Development Project (the **"Development Team"**). Personnel comprising the Development Team shall have the requisite knowledge and expertise necessary to carry out the respective obligations of the parties on **Exhibit A** and be reasonably familiar with the technology to be used in connection therewith. Any party can change its members of the Development Team upon written notice to the other party so long as such new personnel meet the requirements of this sub-paragraph 2(c).

3. **Testing.** Upon completion of each Milestone, the Development Team for Resonant shall notify the Development Team for Skyworks in writing, and Skyworks shall have thirty (30) days (the **"Test Period"**) from the date of such notice to evaluate whether the Milestone has been met and/or test the applicable Duplexer, with Resonant's Development Team's full cooperation and assistance. If Skyworks determines that the Milestone and/or the applicable Duplexer does not conform to the specifications, success criteria, or requirements that are set forth in **Exhibit A** (or, if applicable, an SOW) and on **Exhibit C** (each such failure, a **"Defect"**), Skyworks shall promptly notify the Resonant Development Team of such Defects in writing (the date of such notice, the **"Resonant Defect Notice Date"**) and provide all reasonable information and data concerning its determination that may be useful to Resonant in correcting the Defects. The Development Team for Resonant will make appropriate corrections and notify the Development Team for Skyworks when the corrections are complete. The Test Period shall be extended by an additional thirty (30) days to allow correction of such Defects and to allow for re-testing. If and when Skyworks verifies that the Milestone has been met and/or the applicable Duplexer is free from all Defects, Skyworks shall promptly notify the Resonant Development Team in writing and such notification shall constitute **"Acceptance."** If, on the other hand, Resonant is unable to correct all Defects within thirty days (30) business days following the Resonant Defect Notice Date, Skyworks's sole remedy and recourse for such failure and Defect shall be to terminate this Agreement by delivering written notice to Resonant, which shall become effective 30 days after delivery, or to waive the failure in writing and proceed with the Development Project. If Resonant determines that a Defect or a failure to reach a Milestone is caused to any extent by a failure by Skyworks to perform its obligations set forth on **Exhibit A**, or due to either fab or duplexer



packaging, then Resonant shall promptly notify the Development Team for Skyworks of such fact in writing (the date of such notice the "**Skyworks Notice Defect Date**"), and provide all reasonable information and data concerning its determination that may be useful to Skyworks in correcting such matters. The Development Team for Skyworks will make appropriate corrections (including by working with the fab or packager) and notify the Development Team for Resonant when the corrections are complete. If Skyworks is unable to correct all such matters within thirty (30) business days following the Skyworks Defect Notice Date, Resonant's sole remedy and recourse for such failure shall be to terminate this Agreement by delivering written notice to Skyworks, which shall become effective 30 days after delivery, or to waive the failure in writing and proceed with the Development Project. Following any such termination, none of the parties shall have any further liability to the other and this Agreement, including all exclusivity provisions, shall terminate except for the confidentiality obligations of Section 6 which shall survive such a termination. Commencement of each Milestone following the first Milestone is expressly conditioned upon successful completion of the immediately preceding Milestone as evidenced by Acceptance of the applicable preceding Milestones and any applicable Duplexer.

#### 4. **Intellectual Property; Exclusivity; Commercial License Minimum Terms.**

(a) Proprietary Technology. As between the parties, each party exclusively owns all right, title and interest in and to its Proprietary Technology. Subject only to the licenses granted herein, the parties agree that the design, schematic and/or layout of the Duplexer Die and all Intellectual Property Rights therein are deemed part of Resonant's Proprietary Technology and not, and will not become by this Agreement, the Proprietary Technology of Skyworks. Notwithstanding anything in this Agreement to the contrary, the parties agree that the design specifications for the Development Project (including, without limitation, the Duplexers and filters) and all Intellectual Property Rights therein are deemed part of Skyworks Proprietary Technology and not, and will not become by this Agreement, the Proprietary Technology of Resonant.

(b) Development License. Each party shall have the right to access and use the other party's Proprietary Technology solely to the extent necessary to perform their obligations under this Agreement; provided, however, that (i) all Proprietary Technology disclosed hereunder shall be subject to obligations of confidentiality under Section 6, and (ii) neither party shall have the right to use the other party's Proprietary Technology except as contemplated under this Agreement.

(c) Improvements to Skyworks Proprietary Technology. Skyworks will exclusively own all rights, title and interest in and to any improvements, modifications, enhancements, adaptations, extensions to, or derivative works based upon Skyworks Proprietary Technology whether developed by Skyworks or Resonant or jointly by Skyworks and Resonant pursuant to this Agreement (collectively, "**Skyworks Proprietary Technology Improvements**"), including all Intellectual Property Rights therein. Resonant hereby irrevocably transfers and assigns to Skyworks and agrees to irrevocably transfer and assign to Skyworks all rights, title and interest in and to all Skyworks Proprietary Technology Improvements, including all Intellectual Property Right therein, and such items shall thereafter be deemed part of the Skyworks Proprietary Technology.

(d) Improvements to Resonant Proprietary Technology. Resonant will exclusively own all rights, title and interest in and to any improvements, modifications, enhancements, adaptations, extensions to, or derivative works based upon Resonant Proprietary Technology whether developed by Resonant or Skyworks or jointly by Resonant and Skyworks pursuant to this Agreement (collectively, "**Resonant Proprietary Technology Improvements**"), including all Intellectual Property Rights therein. Skyworks hereby irrevocably transfers and assigns to Resonant and agrees to irrevocably transfer and assign to Resonant all rights, title and interest in and to all Resonant Proprietary Technology Improvements, including all Intellectual Property Right therein, and such items shall thereafter be deemed part of the Resonant Proprietary Technology. Without limitation of this Section 4(d), Exhibit D, section 4 is deemed incorporated to this paragraph by reference.

(e) Further Assurances. Each party shall, and shall cause its employees and agents to, sign, execute and acknowledge or cause to be signed, executed and acknowledged without costs at the expense of the other party, any and all documents and perform such acts as may be reasonably requested by the other party for the purposes of perfecting the foregoing assignments and obtaining, enforcing and defending the Intellectual Property Rights related thereto.

(f) Exclusivity. Unless this Agreement is earlier terminated in accordance with its terms (in which case the covenant in this Section 4(f) will end at the effective date of such termination), Resonant will not contract to sell rights to Resonant-designed filters for the Selected Band in connection with any application similar to mobile front end modules or antenna switch modules, except to Skyworks during the period commencing on the date hereof and ending on 18 months after the Completion (as defined in Section 4(g)) of the Development Project.

(g) Commercial License. Upon successful completion of the first four Milestones in **Exhibit A** (or earlier if agreed by the parties) ("**Completion**"), in the event that Skyworks wishes to obtain distribution or related rights to the Duplexer developed in the Development Project based substantially on the specifications provided pursuant to this Agreement for the Selected Band (the "**Project Duplexer**"), Resonant and Skyworks shall, starting promptly after Completion use their commercially reasonable efforts to negotiate and enter into a license agreement in which Resonant grants such rights to Skyworks (the "**Commercial License**"). The Commercial License shall contain the minimum terms set forth in **Exhibit D** to this Agreement, together with such other terms as the parties may mutually agree. If Resonant and Skyworks cannot agree to the Commercial License within 45 days after Completion, then the sole remedy and recourse of each party is to terminate this Agreement (and all exclusivity provisions hereof), effective upon notice to the other party (without prejudice to any other termination rights that may exist hereunder). Resonant and Skyworks agree that the minimum terms, including royalty terms, set forth in **Exhibit D** and to be included in the Commercial License apply solely to the Project Duplexer, and that neither Skyworks nor Resonant are bound by such terms with respect to any Duplexer other than the Project Duplexer (even if developed contemporaneously during the Development Project), nor bound to enter into any other commercial agreement or license with respect to any other such Duplexer.

**5. Payment. [Intentionally Omitted]**

**6. Confidential Information.**

(a) The parties acknowledge and agree that the existing Mutual Non-Disclosure Agreement between Skyworks and STI dated April 22, 2008 is hereby superseded and replaced in its entirety solely with respect to any and all disclosures made on or after the Original Effective Date but shall remain in full force and effect with respect to any prior disclosures or disclosures unrelated to this Agreement.

(b) Any Recipient(s) of Confidential Information disclosed pursuant to this Agreement agrees to treat the Confidential Information as a trade secret under the law and shall protect the Confidential Information by using the same degree of care, but no less than a reasonable degree of care, to prevent the unauthorized use, disclosure, dissemination or publication of the Confidential Information as the Recipient(s) uses to protect its own comparable confidential and proprietary information. Recipient(s) shall limit the disclosure of Confidential Information to its employees, agents, contractors and representatives having a need-to-know and who are bound by terms and conditions of confidentiality no less restrictive than the terms contained in this Agreement. Any reproduction of Confidential Information, in whole or in part, shall contain all confidential or proprietary legends that appear on the original. Upon receipt of the written request of the Discloser(s), Recipient(s) will return, or give written certification of the destruction of all Confidential Information in any tangible or digital form, including all copies that are in Recipient(s)'s possession or control. Recipient(s) will immediately notify Discloser(s) in writing in the event of any loss or unauthorized disclosure of Confidential Information. The terms of this Agreement shall constitute Confidential Information.

(c) The information shall not be deemed Confidential Information under this Agreement if such information:

- (i) is or becomes known in or accessible to the public domain without breach of this Agreement;
- (ii) is in the possession of the Recipient(s) without restriction at the time of disclosure;
- (iii) is used or disclosed with prior written approval of Discloser(s);



(iv) is independently developed by the Recipient(s) without breach of this Agreement or access to Confidential Information; or

(v) is or becomes known to the Recipient(s) without restriction and without breach of this Agreement or any other agreement;

(d) Subject to the license granted in Section 4(b), each party agrees that it will not itself, or through any parent, subsidiary, affiliate, agent or other third party:

(i) sell, lease, license, sublicense, encumber or otherwise transfer any portion of any other party's Confidential Information or Proprietary Technology (collectively, "**Proprietary Materials**");

(ii) decompile, disassemble, or reverse engineer any Proprietary Materials of any other party, unless and to the extent required under national law; or

(iii) use the Proprietary Materials of any other party to for any purpose other than as expressly contemplated by this Agreement, including to provide services to any third party; or

(iv) provide, disclose, divulge or make available to, or permit use of the Proprietary Materials by any third party without Discloser(s)'s prior written consent.

(e) Notwithstanding that this Agreement shall have terminated or expired, the parties agree to keep in confidence and prevent the disclosure of Confidential Information to any outside person or persons for a period of five (5) years from date of first receipt of such Confidential Information or such longer period of time as may be required by law.

(f) Discloser(s) warrants it has the right to disclose such Confidential Information in accordance with the terms of this Agreement.

(g) Notwithstanding this Section 6, any party hereto shall be entitled to publicly summarize and publicly file this Agreement as required by the rules and regulations of the Securities and Exchange Commission (or any national securities exchange) applicable to such party (with such determination to be made in the sole good faith discretion of the party subject to the requirement); provided the party subject to such requirement shall use its reasonable efforts to redact from any such public filing or public summary all pricing, technical and other sensitive commercial information, as it determines, to the extent permissible under SEC rules for FOIA exemption requests, seeking a period of non-disclosure of at least 5 years.

**7. Right of First Negotiation.** If Resonant's board of directors proposes to sell Resonant to a non-affiliate (STI excluded), then Resonant will notify Skyworks of such proposal before it makes such proposal to any such non-affiliates (other than STI). If Skyworks notifies Resonant within 20 days of receiving the notice from Resonant that it is interested in potentially acquiring Resonant, then Resonant and Skyworks will in good faith negotiate for 45 days regarding a sale of Resonant to Skyworks, starting on the date Resonant receives such notice from Skyworks (the "**Right of First Negotiation**"). If, in their respective sole and absolute discretion they are unable to enter a definitive acquisition agreement in such 45 day period, then Resonant is free to market and sell itself to any party free of the Right of First Negotiation, and without further notice to Skyworks. The Right of First Negotiation will only "reset" (i.e., again be triggered) if Resonant's board of directors determines in its sole business judgment that the sale process which triggered the Right of First Negotiation is to be terminated, and then it later commences a new sale process. All of Skyworks rights under this Section 7 (including any then pending Right of First Negotiation) shall automatically terminate on the earlier to occur of (a) the termination of this Agreement or (b) an initial public offering of Resonant's securities (including via reverse merger into public shell or other transaction using an affiliate of Resonant that achieves substantially the same result of an IPO or reverse merger). Skyworks will not interfere with any proposed sale to another party provided only that Resonant has complied with this Right of First Negotiation. For clarity, the Right of First Negotiation does not apply to a sale by the shareholders of Resonant of their shares, but rather only a transaction to which Resonant itself is a party. Except as expressly set forth in this Section 7, Resonant has no obligation to discuss or negotiate with Skyworks, or notify Skyworks regarding, any transaction involving a sale of or other extraordinary transactions involving Resonant.

## 8. Term and Termination.

(a) Unless terminated earlier by a termination right set forth herein, this Agreement will commence on the Original Effective Date and continue for an initial term of three (3) years following the New Effective Date (the "**Initial Term**"). Thereafter, the Agreement will automatically renew for one-year periods and remain in full force and effect, until either party provides written notice to each of the other parties of its intent to terminate the Agreement at least sixty (60) calendar days prior to the expiration of the then-current term (each, a "**Renewal Term**" and with the Initial Term, the "**Term**"). In addition to the other termination rights set forth herein, this Agreement may be terminated prior to the expiration of the Term by Skyworks or Resonant pursuant to Section 3 or Section 4 or by any party upon written notice following any material breach of this Agreement by any other if such breach has not been remedied within thirty (30) days of such breaching party's receipt of such written notice.

(b) Termination of this Agreement will not affect the provisions which the parties intended to survive including, without limitation, provisions regarding a party's treatment of Confidential Information which provisions will survive termination of this Agreement.

(c) Within fourteen (14) days after the date of termination or discontinuance of this Agreement for any reason whatsoever, each party shall return any Confidential Information of the other party in its possession and all copies thereof, in whole or in part (except to the extent required to a generally applicable document retention policy, provided the provisions of this Agreement shall continue to apply per their terms to such retained documents).

## 9. Warranties; Disclaimer.

(a) Each party represents and warrants to each other party as follows: (i) it is an entity duly organized, validly, existing and in good standing under the laws of the jurisdiction of its formation and has the corporate power to own its assets and properties and to carry on its business as currently conducted; (ii) this Agreement is the legal, valid and binding obligation of such party, enforceable in accordance with its terms; and (iii) the execution, performance and delivery of this Agreement by such party will not conflict with or violate or result in any breach of, or constitute a default under, any contract, agreement or other obligation of such party.

(b) In addition, Resonant and Skyworks each represents and warrants that: (i) they have the right to grant the rights granted herein; (ii) the use of their Proprietary Technology in the form as delivered under this Agreement will not infringe any Intellectual Property Rights of any third party; and (iii) Resonant and Skyworks has not granted any written or oral licenses in, to, or for their Proprietary Technology that would interfere with their performance under this Agreement.

(c) EXCEPT AS OTHERWISE SET FORTH IN THIS AGREEMENT OR IN ANY SOW, NONE OF THE PARTIES MAKES, AND EACH EXPRESSLY DISCLAIMS ANY AND ALL WARRANTIES, WHETHER EXPRESS OR IMPLIED WITH RESPECT TO ANY PROPRIETARY TECHNOLOGY OR CONFIDENTIAL INFORMATION, ITS QUALITY, ITS PERFORMANCE, MERCHANTABILITY, NON-INFRINGEMENT, OR FITNESS FOR A PARTICULAR PURPOSE.

**10. Indemnification.** Resonant and Skyworks, on behalf of itself, its respective employees and agents (each an "**Indemnifying Party**") agrees to defend, indemnify and hold harmless the other and its affiliates, and their respective employees, officers, directors and agents (each an "**Indemnified Party**") against all costs and expenses of the Indemnified Party (including reasonable attorneys' fees) and all damages of the Indemnified Party arising from or in connection with any third party claim or demand based on (a) any negligent acts, omissions, or willful misconduct of the Indemnifying Party, (b) any breach by the Indemnifying Party of this Agreement, (c) any violation of a third party's Intellectual Property Rights by the Indemnifying Party or its Proprietary Technology, (d) any failure of the Indemnifying Party of any applicable law, rule or regulation; or (e) any death, bodily injury or property damage caused or incurred by the Indemnifying Party. To qualify for the above indemnities, the Indemnified Party shall provide the Indemnifying Party with timely written notice regarding the claim such that the timing of the notice does not prejudice the Indemnifying Party's ability to defend or settle the claim. The Indemnifying Party may, at its option, have sole control over the defense and settlement of any action arising under this section, and the Indemnified Party shall cooperate with such defense at the Indemnifying Party's expense. Notwithstanding the foregoing, the Indemnified Party shall have the right to be represented by, and have counsel appear, at its own expense, with respect to any such claim. Skyworks agrees that STI has no liability or responsibility for any actions, errors, omissions or breaches of Resonant or its officers, directors or agents, whether based on a control theory, privity theory or otherwise, and STI is an intended beneficiary of this sentence.

**11. Independent Development.** Each party understands that each other party may currently or in the future be developing information internally, or receiving information from third parties that may be similar to the Confidential Information. Accordingly, nothing in this Agreement will be construed as a representation or inference that any party will not develop products, or have products developed for it, or enter into joint ventures, alliances, or licensing arrangements that, without violation of this Agreement, compete with the products or systems embodying the Confidential Information. Notwithstanding anything herein to the contrary, no license rights under any party's Intellectual Property Rights are granted by implication, estoppel or otherwise by virtue of this section; nor shall anything in this Agreement restrict Recipient's discretion to transfer or assign its personnel, providing the obligations of Recipient under this Agreement are otherwise met.

**12. Agreement with Filter Manufacturer.** If and when the parties enter into an agreement with the selected filter manufacturer, the parties will endeavor to include in such agreement provisions relating to intellectual property and confidentiality matters which are substantially equivalent to the provisions in Sections 4(a)-(e) and 6 of this Agreement.

**13. General.**

(a) The Recipient(s) of Confidential Information under this Agreement acknowledges its obligations to control access to technical data under the U.S. Export Administration laws and regulations and agrees to adhere to such laws and regulations with regard to any Confidential Information received under this Agreement. Without limitation, Recipient(s) will not export (or re-export) or disclose Confidential Information, and will not disclose Confidential Information to a person who is not a U. S. citizen, except as permitted by the laws and regulations of the United States.

(b) All notices or correspondence pertaining to this Agreement shall be addressed and sent as follows:

**Skyworks Solutions, Inc.**

5221 California Ave.  
Irvine, CA 92617 USA  
Attention: Legal Department

**Resonant LLC**

460 Ward Drive, Suite D  
Santa Barbara, CA 93111  
Attention: Resonant Chief Executive Officer

(c) This Agreement shall be governed by and interpreted in accordance with the laws of the State of California without regard to the conflicts of laws provisions of that State. Each party submits to the jurisdiction of the California, U.S. state and U.S. Federal courts.

(d) No party to this Agreement may assign, transfer or delegate all or any part of its rights or obligations under this Agreement without the prior written consent of all other parties, except to an affiliate or an entity that succeeds to all or substantially all of the business assets of such party and in such event only if such entity agrees to be bound by this Agreement. Any attempted assignment or delegation without such consent, except as expressly set forth herein, will be void. Notwithstanding the foregoing, no consent of Skyworks shall be necessary for any assignment or delegation in connection with, or that may be deemed to arise, from a sale of all or substantially all of Resonant's assets, or upon any sale of a majority ownership of Resonant (whether via sale by shareholders or issuance by Resonant) or upon a merger of Resonant provided, however, that the Agreement may not be assigned or transferred to a party Skyworks reasonably determines to be a competitor with respect to cellular frontend module products that are the subject matter of this Agreement.

(e) Any amendment to, or waiver or modification of, this Agreement must be made in writing and signed by all parties.

(f) This Agreement has been executed by the duly authorized representatives of all parties whose signatures appear below. This Agreement may be executed in any number of separate counterparts, each of which shall be deemed to be an original, but which together shall constitute one and the same instrument. This Agreement may be executed by fax.

(g) If any term, condition, or provision in this Agreement is found to be invalid, unlawful or unenforceable to any extent, the parties shall endeavor in good faith to agree to such amendments that will preserve, as far as possible, the intentions expressed in this Agreement. If the parties fail to agree on such an amendment, such invalid term, condition or provision will be severed from the remaining terms, conditions and provisions, which will continue to be valid and enforceable to the fullest extent permitted by law.

(h) This Agreement is intended to supersede and replace the Original Agreement in its entirety. This Agreement constitutes the entire agreement of Skyworks and Resonant with respect to the subject matter hereof and supersedes all other prior and contemporary oral and written agreements and understandings. In the event of a conflict between the terms of the main body of this Agreement and any Exhibits to this Agreement (including any SOW which is deemed attached as an Exhibit) (i) the terms of the main body of this Agreement shall prevail over the terms of any Exhibits; and (ii) the latest executed SOW shall prevail over any earlier SOW and over any other Exhibit.

(i) Resonant, on the one hand, and Skyworks, on the other hand, are independent contractors, are not related and shall not be construed and shall not hold themselves out to be co-employers, joint venturers, partners or any other relationship other than independent contractors.

(j) This Agreement may be executed in one or more counterparts, each of which will be deemed an original, but all of which together will constitute one and the same instrument; however, this Agreement will be of no force or effect until executed by all parties.

**Skyworks Solutions, Inc.**

By: /s/ James P. Young

Name: James P Young

Title: VP of Engineering

Date: May 9, 2013

**Resonant LLC**

By: /s/ Terry Lingren

Name: Terry Lingren

Title: Chief Executive Officer

Date: May 9, 2013



## EXHIBIT A

### SOW

#### Milestone 1 – Resonators - duration 3 months

Resonant responsibilities	Skyworks responsibilities
Select filter band	Select filter band
Design resonators	Provide requirements & specs for the duplexer
Design filters	Select filter manufacturer
Layout and mask	Fund the fabrication of the filter
Fab and measure resonators (and filters)	
Interface with the filter manufacturer	Facilitate interface with filter manufacturer

In the first Milestone Resonant and Skyworks will mutually agree on the duplexer band to be developed. Skyworks will provide the target specification for the agreed upon band, select the filter manufacturer, facilitate discussions between Resonant and the filter manufacturer, and facilitate having the filter die fabricated and packaged to Resonant's design. Resonant will determine the resonator properties required to meet the filter performance specification. Resonant will also design the resonators and filters, consistent with the filter manufacturer's manufacturing requirements. Skyworks will provide the funds necessary to purchase masks and fabricate the filter structures consistent with Skyworks' agreement with the filter manufacturer. After the filter die are fabricated, Resonant will measure them and provide the data to Skyworks.

#### Milestone 2 – Filters - duration 3 months - Milestone 2

Resonant responsibilities	Skyworks responsibilities
Design and fab filters	
Design duplexers	
Layout filter die and design packaged duplexer	Fund the fabrication of the filter
Measure filters (and duplexers)	
Interface with the filter manufacturer	Facilitate interface with filter manufacturer

In the second Milestone, Resonant will design the resonators, filter and packaged duplexer consistent with the filter manufacturer's manufacturing requirements. Also, initial duplexer designs will inform the filter design. Skyworks will provide the funds necessary to purchase masks and fabricate the filter structures consistent with Skyworks' agreement with the filter manufacturer. During this Milestone, Skyworks will facilitate having the filter manufactured to Resonant's design. After the filters and test structures are fabricated, Resonant will measure them and provide the measured performance data along with samples to Skyworks.

**Milestone 3 – Duplexer - duration 3 months - Milestone 3**

<b>Resonant responsibilities</b>	<b>Skyworks responsibilities</b>
Design and fab duplexers	
Layout filter die and packaged duplexer design	Fund the fabrication of the filter
measure duplexer	Perform preliminary qualification testing on duplexer
Interface with the filter manufacturer	Facilitate interface with filter manufacturer

In the third Milestone, Resonant will design the resonators filter, and packaged duplexer consistent with the filter manufacturer's manufacturing requirements. Skyworks will provide the funds necessary to purchase masks and fabricate the filter structures consistent with Skyworks' agreement with the filter manufacturer. During this Milestone Skyworks will facilitate having the filter manufactured to Resonant's design. After the filters and test structures are fabricated, Resonant will measure them and provide the measured performance data including a compliance matrix and samples to Skyworks. Also Skyworks will perform preliminary qualification tests (including ruggedness testing) on packaged Duplexers.

**Milestone 4 – Duplexer to Specification - duration 3 months - Milestone 4**

<b>Resonant responsibilities</b>	<b>Skyworks responsibilities</b>
Iterate duplexer	
Layout filter die and packaged duplexer design	
Spec compliant packaged duplexer	Full electrical testing of duplexer (environment, linearity, etc)

In the fourth Milestone, Resonant will design the resonators filter, and packaged duplexer consistent with the filter manufacturer's manufacturing requirements. Skyworks will provide the funds necessary to purchase masks and fabricate the filter structures consistent with Skyworks' agreement with the filter manufacturer. Skyworks will facilitate having the filter manufactured to Resonant's design. After the filters and test structures are fabricated, Resonant will measure them and provide the measured performance data including a compliance matrix and samples to Skyworks. At this milestone the duplexer performance is expected to be compliant. Skyworks will perform full electrical testing of the duplexer product and provide the data to Resonant. Skyworks will also complete or rerun any qualification tests as needed to qualify the design.

**Milestone 5 – Selection for high volume - duration 3 months - Milestone 5**

<b>Resonant responsibilities</b>	<b>Skyworks responsibilities</b>
Iterate design if needed for particular requirements	Provide information to design teams

In the fifth Milestone, the design approach will compete with other products for inclusion into a high volume product. Iterations of the design to accommodate particular product requirements are possible.



## EXHIBIT B

### Milestone:

- I) Skyworks to fund fabrication and packaging of filters. Resonant to perform characterization data on filter resonators against filter requirements
- II) Skyworks to fund fabrication and packaging of filters. Resonant to sample filter with an agreed upon level of performance. Need not be fully compliant but must be good enough that the device can be used in a module and run through selected prequalification testing.

This performance is defined as:

Ant to TX and Ant to Rx Insertion loss within 0.5dB of the specification over at least one 5-MHz channel.

Tx to Rx isolation within 10 dB of the specification.

Burnout level above 27.35 dBm Pout antenna port power delivered to the load under a 10:1 VSWR and at 95 degrees C ambient temperature on the duplexer EVB.

- III) Skyworks to fund fabrication and packaging of filters. Resonant to sample filter with an agreed upon level of performance. Need not be fully compliant but must be good enough that the device can be used in a module, run through qualification testing and provide viable customer samples.

This performance is defined as:

Ant to TX and Ant to Rx Insertion loss within 0.3dB of the specification.

Tx to Rx isolation, burnout, ruggedness and out of band isolation within the specification.

- IV) Skyworks to fund fabrication and packaging of filters. Resonant to sample filter fully compliant.

### Royalty Structure:

See Exhibit D

# EXHIBIT C

## Specification

TBD based on Skyworks and Resonant agreement of the duplexer band. Below is a band 2 example.

Band 2 Tx1850-1910MHz, Rx1930-1990MHz	F <sub>low</sub> (MHz)	F <sub>high</sub> (MHz)	System Spec Requirements			-20 to +100C except where noted		
			Min	Nom	Max	Note		
ANT to Rx								
Rx Sds32 (Ant to Rx)	1930	1990			3.5	dB	Sds32	
Rx Sds32 (Ant to Rx)	1930	1990		1.25	2.0	dB	Room Temp, typical performance	
Rx Amplitude Ripple (5MHz span)	1930	1990			0.5	dB	Over any 5 MHz span between 1930 & 1990 MHz	
Rx Amplitude Ripple					1.0	dB	Over entire Rx band	
Rx Phase Balance	1930	1990	-5.0		5.0	deg		
Rx Amplitude Balance	1930	1990	-0.5		0.5	dB		
Rx CMRR (POLO)	1930	1990				dB		
Rx EVM	1930	1990			3.0	%	WCDMA, 0dBm	
Rx Group Delay (not spec'd in Customer)	1930	1990				nSec	for data only	
Rx differential impedance				100		Ohms	Used as termination impedance for all measurements	
Rx VSWR	1930	1990			2.0	-	Balanced	
Rx Return Loss	1930	1990			-9.6	dB	Balanced	
Ant VSWR (Rx Freq.)	1930	1990			2:1	-		
Ant Return Loss (Rx Freq.)	1930	1990			-9.6	dB		
Rx IM2 -1	1930	1990			-110	dBm	80 MHz CW @ -16.5dBm applied to antenna port, Tx port CW signal @ +21.5 measured power out antenna port frequency is 1850M to 1910 MHz	
Rx IM2 -2	1930	1990			-110		(2*Tx frequency +80 MHz) CW at -16.5 dBm applied to antenna port, Tx port CW signal @ +21.5 measured power out antenna port frequency is 1850MHz to 1910 MHz	
Rx IM3-1	1930	1990			-110	dBm	40 MHz CW @ -16.5dBm applied to antenna port, Tx port CW signal @ +21.5 measured power out antenna port frequency is 1850M to 1910 MHz	
Rx IM3-2	1930	1990			-110		(Tx frequency -80 MHz) CW @ -16.5dBm applied to antenna port, Tx port CW signal @ +21.5 measured power out antenna port frequency is 1850MHz to 1910 MHz	
Rx IM3-3	1930	1990			-110		(3*Tx frequency -80 MHz) CW @ -16.5dBm applied to antenna port, Tx port CW signal @ +21.5 measured power out antenna port frequency is 1850MHz to 1910 MHz	
Triple Beat Ratio (dBc)	1930	1990	82			dBc	Please reference Triple Beat measurement document.	



Rx ATT 1MHz -1850MHz	1	1850	20			dB	Sds32 (balanced)
Rx ATT 1765-1835MHz	1765	1835	25			dB	Sds32 (balanced)
Rx ATT 1850-1910MHz (Tx frequencies)	1850	1910	45			dB	Sds32 (balanced)
Rx ATT 2005-2050MHz	2005	2050	10			dB	Sds32 (balanced)
Rx ATT 2050-2075MHz	2050	2075	25			dB	Sds32 (balanced)
Rx ATT 2400-2484MHz ISM	2400	2484	30			dB	Sds32 (balanced)
Rx ATT 2810-5815MHz	2484	6520	25			dB	Sds32 (balanced)
Rx ATT 9640-9960MHz	10540	10860	25			dB	(over 9GHz)
<b>Tx to ANT</b>							
Tx S21	1850	1910		3.0		dB	S21
Tx S21	1850	1910	1.25	2.0		dB	Room Temp
Tx Amplitude Ripple (5MHz span)	1850	1910		0.5		dB	
Tx EVM	1850	1910		2.0		%	Room Temp
Tx EVM	1852.4	-		3.0		%	WCDMA 26.35dBm
Tx EVM	-	1907.6		3.0		%	WCDMA 26.35dBm
Tx VSWR FOM	1850	1910	1.4	2.0			Minimizing this is important for PA performance. The normalized impedance can be other than 50 Ohms but the dispersion of the impedance must be minimized. Reference the Tx VSWR FOM measurement defined in the power point file.
Tx Return Loss	1850	1910		-9.6		dB	
Ant VSWR (Tx Freq.)	1850	1910		2:1		-	
Ant Return Loss (Tx Freq.)	1850	1910		-9.6dB		dB	
Tx ATT 10-728MHz	10	728	30			dB	
Tx ATT 728-764MHz	728	764	44	48		dB	
Tx ATT JCDMA 869- 894MHz	869	894	44	48		dB	US cell Rx band noise rejection
Tx ATT Wideband GPS lower side lobe	1566	1574	40			dB	wideband GPS lower side lobe
Tx ATT Regular GPS 1574- 1577	1574	1577	45			dB	regular GPS
Tx ATT Wideband GPS upper side lobe	1577	1585	40			dB	wideband GPS upper side lobe
Tx ATT Glonass	1597	1607	45			dB	Glonass (Russian GPS)
Tx ATT 1606-1680MHz	1606	1680	30			dB	
Tx ATT DCS 1930- 1990MHz	1930	1990	44	48		dB	PCS Rx Band noise rejection for SHDR
Tx ATT 2010-2025MHz	2010	2025	20			dB	+15 to +85C only, per Customer
Tx ATT 2110-2155MHz	2110	2155	44	48		dB	AWS Rx band noise rejection for SHDR
Tx ATT ISM 2400- 2500MHz	2400	2500	40			dB	ISM band rejection
Tx ATT 5GHz ISM (4900- 5900)	4900	5900	20				

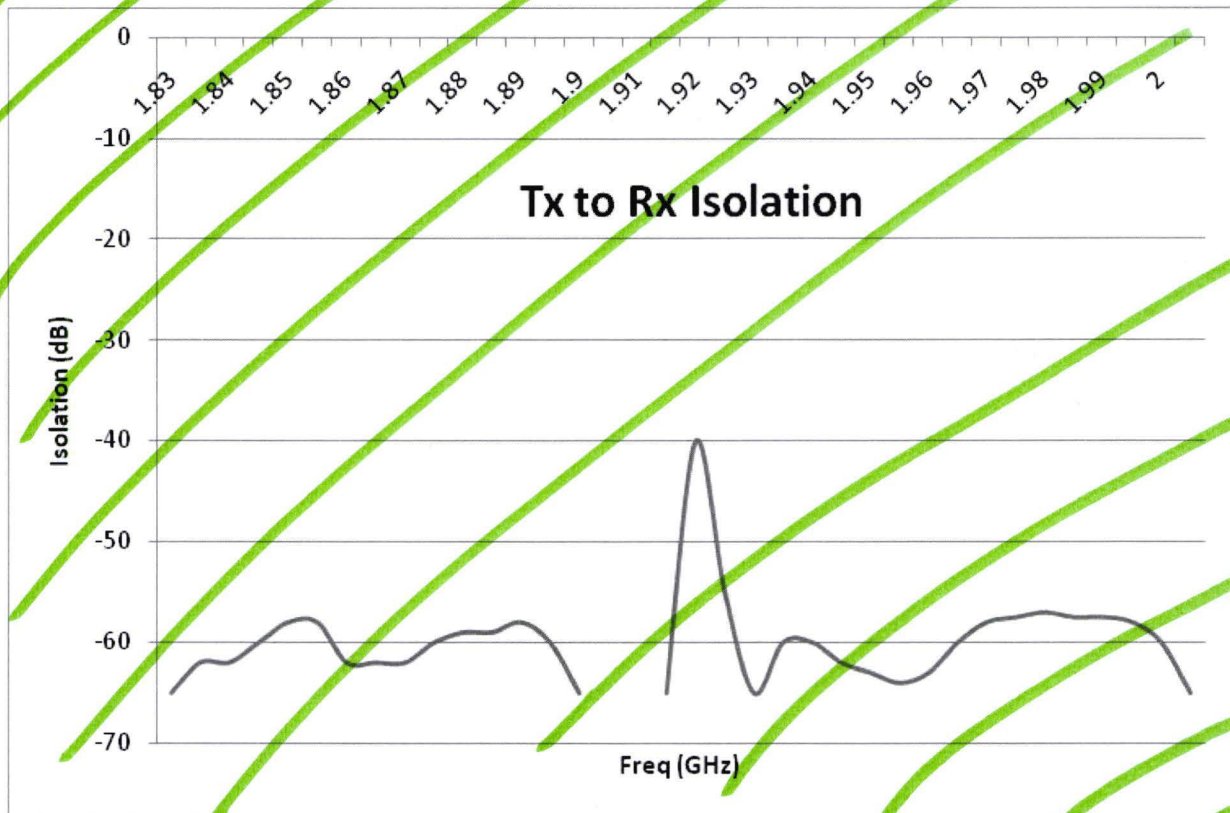


Tx ATT 3690-3830MHz, 2nd Harmonic	3690	3830	25	dB	2nd harmonic
Tx ATT 3rd Harmonic 5540-5860MHz	5540	5860	18	dB	3rd Harmonic
Tx ATT 4th Harmonic 7390-7650MHz	7390	7650	15	dB	4th Harmonic
Tx ATT 5th Harmonic 9240-9560MHz	9240	9560	15	dB	5th Harmonic
Tx ATT 6th Harmonic 11090-11470MHz	11090	11470	15	dB	6th Harmonic
Tx ATT (BAND I RX IMAGE)	1770	1830		dB	Data only (2Tx -Rx)
Tx ATT Rx-Tx	80	80		dB	Data only (Rx - Tx)
Rated output power at ANT	1850	1910	26.35		Used for HTOL testing per Skyworks condition (1k hrs @ 100C product level). See application note. Duplexer case temperature is typically around 115 to 125C in application. Failure is defined as an insertion loss change >0.2 dB for the Tx to Ant and RX to Ant path or a VSWR change of greater than 10% after 1K hours at rated output power.
Ruggedness at 10:1 VSWR, 95C; 27.35 dBm output	1850	1910	Pass	Pass/Fail	1 dB guard band. No damage is pass criteria.
<b>Tx to Rx ISOLATION</b>					
Isolation (@ TX freq) Differential	1850	1910	55	dB	Sds31 Balanced, differential-mode
Isolation (@ TX freq) Common-Mode	1850	1910	55	dB	Scs31 Balanced, common-mode
Isolation (@ RX freq) Differential	1930	1990	50	dB	Sds31 Balanced, differential-mode
Isolation (@ GPS)	1574	1577	40	dB	Sds31 Balanced, differential-mode
Isolation (@2nd Harmonic)	3690	3830	20	dB	Sds31 Balanced, differential-mode
Isolation (@3rd Harmonic)	5540	5860	20	dB	Sds31 Balanced, differential-mode
<b>OTHER</b>					
ESD (HBM)			-1500	1500	Volts
ESD (MM)			-100	100	Volts

Typical examples of expected band 2 performance:







CONFIDENTIAL



## EXHIBIT D

### MINIMUM TERMS FOR COMMERCIAL LICENSE OF DUPLEXER

The Commercial License shall contain the following Minimum Terms. No additional substantive terms shall apply unless mutually agreed upon in writing by the parties.

1. **Definitions:** "**Licensed Product**" shall mean any and all Project Duplexers offered by Skyworks or its sublicensees which incorporate in whole or in part, Resonant Proprietary Technology.
2. **License.** Upon the agreement of the parties to proceed with Skyworks' manufacturing or use of the Project Duplexer in any commercial applicable or first sale thereof, Resonant shall grant Skyworks a worldwide license to develop, make, have made, use, offer to sell, sell and have sold the Licensed Products (including the right to grant sublicenses as necessary to make or have made Licensed Products as contemplated hereunder), solely as embodied in the Project Duplexer.
3. **New Developments and Ownership.** Each filter die design/schematic/layout will be specific to a particular Skyworks specification, and to a particular FAB. Resonant will exclusively own and control each such filter die design/schematic/layout. Any changes will be made by Resonant if a new FAB is brought in by Skyworks, or if Skyworks wishes to address some other aspect of the filter die design to improve it, such as power handling, reliability, cost, etc. The parties agree that this Agreement, including Royalty, and the Licensed Product, pertains solely to the particular Skyworks Project Duplexer set forth in this Agreement and its Exhibits.
4. **Pricing.** Skyworks shall pay Resonant the royalties set forth on the table below for Licensed Products sold hereunder (whether by Skyworks or any sublicensee) (the "**Royalty**"). The Royalty shall commence on the first date of production of a Licensed Product. Royalties shall be paid within forty-five (45) days after the close of a given calendar quarter, and shall include reports substantiating the amounts owed. Skyworks shall keep complete and accurate records pertaining to the sale, use or other disposition of Licensed Products in reasonable detail to permit Resonant to confirm the accuracy of the royalty payments due hereunder, and Resonant shall have the right to audit such books and records under terms agreed to by the parties in the Commercial License.

Quantity	Royalty
0-10,000,000 shipped Die	\$0.10
10,000,001-30,000,000 shipped Die	\$0.06
30,000,001-90,000,000 shipped Die	\$0.05
More than 90,000,000 shipped Die	\$0.04

5. **Term and Termination.** The Term of the Commercial License shall be 3 to 4 years from the date of execution of the Commercial License. The parties will have termination rights in the event of material breach, bankruptcy, and any other matters to be set forth in the Commercial License. Upon termination or expiration of the Commercial License, all licenses granted by the parties hereunder shall terminate. Such license (including all Royalty and other terms) shall continue in effect after the Commercial License is terminated or expires with respect to any Skyworks' products containing Project Duplexers in production at the time of termination or expiration.
6. **Indemnification.** Resonant shall indemnify for third party claims against Skyworks alleging that the Resonant Proprietary Technology, as embodied in the Duplexer Die licensed under the Commercial License, violates third party intellectual property rights. Skyworks shall indemnify for third party claims against Resonant alleging that any Skyworks Proprietary Technology that may be embodied in a Duplexer Die licensed under the Commercial License (including the implementation of such a Duplexer Die or the combination of such a Duplexer Die with other Skyworks Proprietary Technology), violates third party intellectual property rights. Such indemnification shall include other standard terms and restrictions appropriate for provisions of this type.

7. Other Terms. The Commercial License shall include such other terms regarding warranties, disclaimers, confidentiality, limitations of liability and such other related matters as the parties may mutually agree, and as are common for agreements of this type.

CONFIDENTIAL TREATMENT