

Understanding Patent Issues During IEEE Standards Development

Patented Technology in IEEE standards

This guide offers information concerning the IEEE Standards Association and its patent policies but does not state the IEEE-SA Patent Policy. The word “shall” is used in these FAQs when it refers to corresponding language in the *IEEE-SA Standards Board Bylaws*, the *IEEE-SA Standards Board Operations Manual*, or the *Letter of Assurance* form. Definitive statements of the IEEE Standard Association's policies and procedures concerning patents can be found in the *IEEE-SA Standards Board Bylaws* and the *IEEE-SA Standards Board Operations Manual*, which control in the event of a conflict between them and this guide. These FAQs should not be considered legal advice; readers may wish to consult with their legal advisors.

A complete package of patent-related materials is available at <http://standards.ieee.org/about/sasb/patcom/materials.html>. This package includes all the documentation you need to comply with the IEEE Standards Association Patent Policy concerning essential patents. A flowchart with additional guidance on the methodologies used by the [IEEE-SA Standards Board Patent Committee](#) is part of this package. If you include patented technology in your standard, then you may have incorporated an essential patent.

Essential Patent Claims

1. *What is an Essential Patent Claim?*

An Essential Patent Claim means any Patent Claim [including claims in issued patent(s) or pending patent application(s)] the use of which was necessary to implement either a mandatory or optional portion of a normative clause of the IEEE Standard when, at the time of the IEEE Standard's approval, there was no commercially and technically feasible non-infringing alternative implementation method for such mandatory or optional portion of the normative clause. An Essential Patent Claim does not include any Patent Claim that was essential only for Enabling Technology or any claim other than that set forth above even if contained in the same patent as the Essential Patent Claim. See clause 6.1 of the *IEEE-SA Standards Board Bylaws* at <http://standards.ieee.org/develop/policies/bylaws/sect6-7.html>.

2. *Does the IEEE determine whether a patent is essential when requesting a Letter of Assurance?*

No. When it requests a Letter of Assurance, the IEEE has made no determination of any Patent Claim's essentiality.

Call for Essential Patents Claims at IEEE Standards Developing Meetings

3. *What is a call for patents?*

A call for patents is a reminder made by the chair, or the chair's designee, at an IEEE standards development meeting. The chair or the chair's designee informs the participants that if any individual believes that Patent Claims might be Essential Patent Claims, that fact should be made known to the entire Working Group and duly recorded in the minutes of the Working Group meeting.

4. *How often should a Working Group chair issue a call for potential Essential Patent Claims?*

A Working Group chair or his or her designee shall issue the call at every Working Group meeting. If the Working Group does not meet face-to-face or telephonically, the Working Group chair should issue a call to the Working Group via written communications (electronic or otherwise) on a regular basis. It is strongly recommended that the IEEE-SA Standards Board Patent Committee-developed slide set be used. Note that a call for patents shall be made at every standards development meeting. This includes, but is not limited to, Working Group and task force meetings. For information about groups that meet for several days during a single week, see also question 6.

5. *Should a Call for Patents be issued at a Study Group or other meetings that occur before approval of a Project Authorization Request (PAR)?*

No. However, it is recommended that the *Patent Slides for pre-PAR Meetings* be used in these meetings.

6. *Our group gathers for several days during a single week. Does the chair have to announce the IEEE-SA Patent Policy every day?*

The Working Group chair or his or her designee shall issue the call at every standards-developing meeting. If a group is meeting for consecutive days and the attendance is substantially the same for each day of the gathering, the policy only needs to be read once. If the chair plans not to read or display the policy each day, then in order to satisfy the requirement to issue a patent call, the chair may either (a) ensure that the policy or a URL for it has been sent out to all attendees prior to the meeting (and is available in the registration packet for any on-site registrants), or (b) announce each day that the meeting is subject to the IEEE-SA Patent Policy as read or displayed on the first day. Note, though, that this rule applies separately to each group that is meeting during the week. For example, if a Working Group holds a meeting during the

same week as its task group and/or task force, the chair of each of those groups shall read or display the policy at that group's meeting.

7. *How does the chair determine that the participation in a group that is meeting for consecutive days is substantially the same?*

The chair has to use his/her judgment to determine this. It could, for example, be done based on the attendance numbers each day. The default action is to read the IEEE-SA Patent Policy slides.

8. *What if a group meets telephonically?*

If the Working Group meets telephonically, you can send the slides in an email to the participants in advance of the call, or include a link in the meeting announcement. In order to satisfy the requirement to issue a patent call, the chair may then ask at the start of the call whether there is anybody participating that has not read the policy. If someone says they have not, then the chair needs to either (a) read the IEEE-SA Patent Policy slides aloud, or (b) send the policy or URL electronically and pause the call until all participants have read the policy.

9. *What if the group does not meet either in person or by telephone – for example, the group meets only through email or other interactive electronic means?*

If the group does not meet face-to-face or telephonically, the chair of the group should issue the call for patents via written communications (electronic or otherwise) on a regular basis.

Letter of Assurance

10. *What is a Letter of Assurance?*

Letter of Assurance is the term that IEEE-SA uses to describe a document stating a Submitter's position with respect to ownership, enforcement, or licensing of an Essential Patent Claim that may be incorporated into a specifically referenced IEEE Standard. The specific requirements for a Letter of Assurance are defined in clause 6.1 of the *IEEE-SA Standards Board Bylaws* at <http://standards.ieee.org/develop/policies/bylaws/sect6-7.html>.

11. *When does the IEEE send out a request for a Letter of Assurance?*

The Working Group chair or, where appropriate, the Sponsor chair will send out a request for a Letter of Assurance whenever the chair is notified, at any time and by any means, that the [Proposed] IEEE Standard may require the use of a potential Essential Patent Claim.

12. *How will a participant know if the IEEE has accepted a Letter of Assurance?*

Accepted Letters of Assurance can be found on the IEEE-SA's web site at <http://standards.ieee.org/about/sasb/patcom/patents.html>.

13. *What happens if the IEEE has not received assurances regarding all potential Essential Patent Claims incorporated in a [Proposed] IEEE Standard?*

If the IEEE is aware of an asserted potential Essential Patent Claim and no corresponding Letter of Assurance has been received, the matter will be referred to the IEEE-SA Standards Board Patent Committee through the PatCom Administrator. The IEEE-SA Standards Board Patent Committee will review the circumstances and make a recommendation to the IEEE-SA Standards Board.

- 13A. *What additional actions are possible if the IEEE has not received assurances regarding all potential Essential Patent Claims incorporated in a [Proposed] IEEE Standard?*

If PatCom or the SASB becomes aware of an asserted potential essential patent claim for which an Accepted LoA (on the IEEE-SA Standards Board approved patent letter of assurance form) is not on file, the information will be shared with the relevant Sponsor(s) and Working Group.

The participants in the development of the standards project at issue should be cognizant of the fact that there is not such an Accepted LoA on file, and that the SASB will take that fact into account when determining whether or not to approve a standard. Accordingly, such participants may wish to consider alternative technologies.

In addition, the SASB reserves the right to withdraw an approved standard should it be determined that market implementation is being hindered by the assertion of essential patent claims in the absence of an Accepted LoA.

14. *How should Working Groups handle existing Letters of Assurance provided to IEEE when developing an amendment, corrigendum, edition, or revision of the particular standard referenced in the Letter of Assurance?*

As stated in clause 6.3.5 of the *IEEE-SA Standards Board Operations Manual*:

An Accepted Letter of Assurance referencing an existing standard, amendment, corrigendum, edition, or revision will remain in force for the application of the Essential Patent Claim(s) to the technology specified in another amendment, corrigendum, edition, or revision of the same IEEE Standard but only if (a) the application of the technology required by the amendment, corrigendum, edition, or revision of the same IEEE Standard has not changed from its previous usage and (b) the same Essential Patent Claims covered by the prior Accepted Letter of Assurance remain Essential Patent Claims in the same IEEE Standard or revision thereof.

The Working Group chair shall initiate a request for a new Letter of Assurance from a known Submitter when re-using portions of, or technologies specified in, an existing IEEE Standard, amendment, corrigendum, edition, or revision referenced in an Accepted Letter of Assurance in a different IEEE Standard.

15. *How should Working Groups handle Letters of Assurance when re-using portions of a non-IEEE standard in an IEEE Standard?*

The Working Group chair shall initiate a request for a Letter of Assurance from holders of potential Essential Patent Claims when re-using portions of a non-IEEE standard in an IEEE Standard. The Working Group chair should not assume that any patent letters of assurance (or patent declarations) given to the developer of the non-IEEE standard will also apply to the IEEE Standard. In addition, there are specific requirements that must be incorporated into an IEEE Letter of Assurance in order for it to have the possibility of becoming an Accepted Letter of Assurance.

- 15A. *What are some implications of normatively referencing a non-IEEE standard in an IEEE standard?*

When an IEEE standard normatively references a standard developed by another SDO, the technical content of the referenced standard is incorporated by reference in the IEEE standard. In addition, Working Groups should be aware that the policies governing the other SDO's development process (for example, patent policy and copyright policy) apply to the referenced standard. Because of these considerations, section 6.4.6 of the *IEEE-SA Standards Board Operations Manual* states that "IEEE and other nationally or internationally recognized standards developing organizations (SDOs) are preferred as the source of normative references," but standards developed by other organizations are not precluded from being referenced.

- 15B. *When incorporating a non-IEEE standard in whole and unmodified through a normative reference in an IEEE standard, should the Working Group chair seek LOAs for potential Essential Patent Claims in the referenced standard?*

If an IEEE standard incorporates a non-IEEE standard in whole and unmodified through a normative reference, an implementation that is built to conform to the IEEE standard will, by definition, also conform to the referenced standard. Therefore, because the patent policy of the originating SDO applies to the referenced standard, there should be no need to request additional LOAs.

Participants and Notification to IEEE of Essential Patent Claims

16. *Do individual participants have to notify the IEEE if they own, or their employer owns, potential Essential Patent Claims incorporated in an IEEE Standard? What if they are uncertain whether a Patent Claim they own, or their employer owns, is essential?*

Individuals participating in the IEEE standards development process are required to notify the IEEE of the identity of a holder of any potential Essential Patent Claims (but not the identity of the Essential Patent Claim) where (1) the individual participant is personally aware that the holder may have a potential Essential Patent Claim; (2) the holder is the participant or an entity the participant is from, employed by, or otherwise represents; and (3) the potential Essential Patent Claim is not already the subject of an Accepted Letter of Assurance. If such a participant is uncertain whether the patent is essential, the participant still shall notify the IEEE (or cause the IEEE to be notified) of the possibility because the participant is personally aware of a claim that is a *potential* Essential Patent Claim.

17. *When is a potential Essential Patent Claim considered to be the subject of an Accepted Letter of Assurance?*

A potential Essential Patent Claim is the subject of an Accepted Letter of Assurance for a particular standard (a) if there is an Accepted Letter of Assurance for the potential Essential Patent Claim or related potential Essential Patent, (b) if there is an Accepted Blanket Letter of Assurance from the holder of the potential Essential Patent Claim, or (c) an Accepted Letter of Assurance for the potential Essential Patent Claim exists under the conditions defined in *IEEE-SA Standards Board Operations Manual* subclause 6.3.5 *Applicability of Letters of Assurance to Amendments, Corrigenda, Editions, or Revisions* (see question 14).

17A. *Does a Blanket LOA citing a standard provide assurance for subsequent amendments or revisions of the standard?*

Yes. A Blanket LOA that references a specific standard (e.g., IEEE Std 802.3) without further qualification provides assurance for all current and future amendments, revisions, editions of the same standard. (See questions 14 and 17.)

17B. *Does a Letter of Assurance citing specific patents that cites a standard provide an assurance for subsequent amendments or revisions of the standard?*

Yes. An LOA that references a specific standard (e.g., IEEE Std 802.3) without further qualification provides, as to the identified patents, assurance for all current and future amendments, revisions, editions of the same standard. (See question 14.)

17C. *Does a Blanket LOA that cites a specific amendment to a standard continue to apply once the amendment has been rolled into the standard (i.e., in a subsequent revision or edition), and the cited amendment becomes obsolete? If so, is it still a Blanket LOA that covers the entire subsequent revision?*

Yes. A Blanket LOA that references a specific amendment of a standard (e.g., IEEE Std 802.3nnn) provides assurance for any of the Submitter's potential Essential Patent Claims that become Essential Patent Claims as a result of the amendment, and it continues to provide such assurance when the amendment has been rolled into the

standard, but only if the application of the technology required by the amendment has not changed from its previous usage. (See *IEEE-SA Standards Board Operations Manual* 6.3.5) (See also questions 14 and 17.)

- 17D. *Does a Letter of Assurance that cites specific patents and cites a specific amendment to a standard continue to apply once the amendment has been rolled into the standard (i.e., in a subsequent revision or edition), and the cited amendment becomes obsolete?*

Yes. An LOA that references a specific amendment of a standard (e.g., IEEE Std 802.3nnn) provides assurance for the Patent Claims identified in the LOA that become Essential Patent Claims as a result of the amendment, and it continues to provide such assurance when the amendment has been rolled into the standard, but only if the application of the technology required by the amendment has not changed from its previous usage. (See *IEEE-SA Standards Board Operations Manual* 6.3.5) (See also question 14.)

18. *How do I find out if a particular company has submitted an Accepted Letter of Assurance?*

Accepted Letters of Assurance are listed on the IEEE-SA's web site at <http://standards.ieee.org/about/sasb/patcom/patents.html>. Letters of Assurance accepted after 31 December 2006 will be posted on the web site as they are accepted and Letters of Assurance accepted prior to that date will be posted over time.

19. *What are examples of the means by which an individual participant can notify the IEEE (or cause the IEEE to be notified) that his or her employer is the holder of a potential Essential Patent Claim incorporated in a [Proposed] IEEE Standard? Does the individual participant need to identify the Essential Patent Claim specifically?*

An individual participant could fulfill his or her duty to the IEEE by telling the Working Group chair that his or her employer is the holder of a potential Essential Patent Claim. Alternatively, the participant could request that his or her employer submit a Letter of Assurance or otherwise notify the IEEE that it is the holder of a potential Essential Patent Claim. In the latter case, the participant fulfills his or her duty to the IEEE only if his or her employer submits a Letter of Assurance or otherwise notifies the IEEE that it is the holder of a potential Essential Patent Claim. If the employer declines to submit a Letter of Assurance or otherwise notify the IEEE, and if the participant continues to believe the employer may hold a potential Essential Patent Claim, then the participant has not fulfilled his or her duty. The participant, therefore, shall inform the IEEE of the holder of that potential Essential Patent Claim. In all cases, the duty on the participant is only to inform the IEEE of the identity of the holder of a potential Essential Patent Claim and not the patent, application, or particular claim itself. A participant does not need to respond to a call for patents if the relevant potential Essential Patent Claim is already covered by an Accepted Letter of Assurance or request for a Letter of Assurance.

20. *Can a response to the call for patents be made via email in advance or subsequent to a meeting?*

The duty on the participant is to inform the IEEE of the identity of the holder of a potential Essential Patent Claim. The chair can be notified at any time (in advance or subsequent to a meeting is acceptable). The declaration must be made in a recordable manner such as email.

21. *Do participants have to notify IEEE of third party patent holders? For these purposes, third party means a person other than the participant or an entity the participant is from, employed by, or otherwise represents.*

Participants are not required to notify the IEEE that they are aware of any potential Essential Patent Claims held by a third party. Participants may make such disclosure at their own discretion. Although there is no obligation to notify the IEEE of third party patent holders, the IEEE encourages participants to do so. This encouragement is particularly strong because the third party may not be a participant in the standards development process.

22. *What duty does an individual participant have to the IEEE if a participant's employer owns a potential Essential Patent Claim but the individual participant doesn't have personal knowledge of such claim?*

As noted in the answer to question 16, a participant only needs to notify the IEEE of the holder of a potential Essential Patent Claim if such participant is personally aware that his or her employer has a potential Essential Patent Claim. There is no duty for that employee (or anyone else in his or her organization) to conduct a patent search, but the IEEE does expect that participants will conduct themselves in good faith. This expectation arises both from the IEEE Code of Ethics and from the background legal rules. The IEEE Code of Ethics makes clear, for example, that participants "accept responsibility in making decisions consistent with the safety, health and welfare of the public." Similarly, the U.S. Supreme Court stated in the Allied Tube case that SDOs operate based on "the merits of objective expert judgments" using "procedures that prevent the standard-setting process from being biased by members with economic interests in stifling product competition." Consequently, while the policy does not require a patent search, the IEEE does encourage each participant to make sufficient inquiry to satisfy him or herself that s/he is not being deliberately shielded from relevant knowledge and that the employer does not have any potential Essential Patent Claims.

23. *Can an individual participate in standards development activities if his or her employer is unwilling to submit a Letter of Assurance once requested or to provide the assurance indicated in the IEEE-SA Patent Policy in a Letter of Assurance?*

Yes. As long as the participant complies with the requirement that he or she notify the IEEE that his or her employer is the holder of a potential Essential Patent Claim if the participant is personally aware that his or her employer is such a holder, the individual can continue to participate in standards development activities. (See also question 19.)

24. *Does the IEEE-SA Patent Policy require participants or their employers to make an assurance or submit a Letter of Assurance?*

No. Submission of a Letter of Assurance is not a precondition to participation. Participants do have a duty to inform the IEEE if they or an entity they are from, employed by, or otherwise represents holds potential Essential Patent Claims. (See questions 16, 21, and 23 for more information.)

25. *What does a participant's employer need to do to determine whether it has any potential Essential Patent Claims when it receives a request from the IEEE for a Letter of Assurance? Specifically,*

(a) *Does the employer need to do a patent search?*

No. The policy expressly states that there is no duty to conduct a patent search; but the employer may do so if it wishes.

(b) *Does the employer need to talk to every person they have sent to the Working Group?*

When the employer receives the request for a Letter of Assurance, the employer can state its licensing position with respect to any Patent Claims that might be or become Essential Patent Claims relating to the particular standard referenced in the Letter of Assurance. In the alternative, the employer can indicate that it is not aware of any Patent Claims that the employer may own, control, or have the ability to license that might be or become Essential Patent Claims, but **only if** the employer does a Reasonable and Good Faith Inquiry to determine the existence of any such Patent Claims. As described in clause 6.1 of the *IEEE-SA Standards Board Bylaws*, a "Reasonable and Good Faith Inquiry" includes, but is not limited to, the employer using reasonable efforts to identify and contact those individuals who are from, employed by, or otherwise represent the employer and who are known to the employer to be current or past participants in the development process of the [Proposed] IEEE Standard identified in the Letter of Assurance, including, but not limited to, participation in a Sponsor Ballot or Working Group. If the Submitter did not or does not have any participants, then a "Reasonable and Good Faith Inquiry" may include, but is not limited to, the Submitter using reasonable efforts to contact individuals who are from, employed by, or represent the Submitter **and** who the Submitter believes are most likely to have knowledge about the technology covered by the [Proposed] IEEE Standard. As described above, the employer only needs to engage in a Reasonable and Good Faith Inquiry if it wants to avoid providing an assurance based on its assertion

that it is not aware of any Patent Claims that the employer may own, control, or have the ability to license that might be or become Essential Patent Claims.

Submitting a Letter of Assurance

26. *Do the terms "potential Essential Patent Claims" and "Patent Claims that the Submitter may own, control, or have the ability to license . . ." include claims described in patent applications?*

Yes. The definition of Patent Claims includes pending patent applications.

26A. *What does it mean when a Submitter checks the box labeled as "(Optional) Such a license will include a Reciprocal Licensing requirement" under D.1.a or D.1.b in an LOA?*

When this box is checked under D.1.a or D.1.b in an LOA, it means that the Submitter is giving notice that it may choose to include a Reciprocal Licensing requirement as a condition of granting a license. (See also questions 78-80 for additional information on Reciprocal Licensing.)

27. *At what point should a Letter of Assurance be submitted?*

The IEEE encourages the submission of a Letter of Assurance as soon as reasonably feasible in the standards development process once the PAR has been approved by the IEEE-SA Standards Board.

28. *Who should submit a Letter of Assurance?*

Any person or entity that believes that it holds a potential Essential Patent Claim may submit a Letter of Assurance.

The IEEE will request licensing assurance on the IEEE-SA Standards Board approved Letter of Assurance form from any person upon being notified that an IEEE Standard may require the use of a potential Essential Patent Claim. Although the IEEE encourages any person receiving a request for assurance to submit the Letter of Assurance, the IEEE may not use any coercion in requesting the assurance. This means the IEEE cannot require that a person submit a Letter of Assurance or provide a particular assurance with respect to ownership, enforcement, or licensing of an Essential Patent Claim in order to participate in an IEEE standards development activity.

A Submitter of a Letter of Assurance is required to submit a Letter of Assurance if, after providing a Letter of Assurance to the IEEE, the Submitter becomes aware of additional Patent Claim(s) not already covered by an Accepted Letter of Assurance as further described in the answer to question 30.

29. *Who should sign a Letter of Assurance?*

Only a person who is authorized to sign and bind the Submitter (including its Affiliates unless specifically and permissibly excluded) to the assurance shall sign the Letter of Assurance. Unless the Letter of Assurance is received from an individual whose title suggests authority for intellectual property and legal matters, the IEEE-SA Standards Board Patent Committee Administrator will take follow-up action.

30. *Does a Submitter have to provide an additional assurance if it becomes aware of Essential Patent Claims not already covered by an Accepted Letter of Assurance?*

If a Submitter becomes aware of additional Patent Claim(s) that are not already covered by an Accepted Letter of Assurance, that are owned, controlled, or licensable by the Submitter, and that may be or become Essential Patent Claim(s) for the same IEEE Standard, then such Submitter shall submit a Letter of Assurance stating its position regarding enforcement or licensing of such Patent Claims. For the purposes of this commitment, the Submitter is deemed to be aware if any of the following individuals who are from, employed by, or otherwise represent the Submitter have personal knowledge of additional potential Essential Patent Claims, owned or controlled by the Submitter, related to a [Proposed] IEEE Standard and not already the subject of a previously Accepted Letter of Assurance: (a) past or present participants in the development of the [Proposed] IEEE Standard; or (b) the individual executing the previously Accepted Letter of Assurance. (See also question 28.)

31. *Can the Letter of Assurance form be modified?*

No. In submitting a Letter of Assurance, use of the LOA form is mandatory. (Completing the form is not considered a modification.)

32. *What happens when a Letter of Assurance is not accepted?*

The Submitter will be informed by the PatCom Administrator that the Letter of Assurance was not accepted and why it was not accepted.

33. *Do attachments submitted with a Letter of Assurance become a part of the Accepted Letter of Assurance?*

Yes. (See also question 51.)

34. *Who can enforce an Accepted Letter of Assurance?*

Users and implementers may seek to enforce the terms of any Accepted Letter of Assurance. In certain circumstances and at its sole discretion, the IEEE may also seek to enforce the terms of an Accepted Letter of Assurance.

Affiliates

35. *Who is an Affiliate?*

An Affiliate is an entity that directly or indirectly, through one or more intermediaries, controls the Submitter or Applicant, is controlled by the Submitter or Applicant, or is under common control with the Submitter or Applicant. For the purposes of this definition, the term “control” and its derivatives, with respect to for-profit entities, means the legal, beneficial, or equitable ownership, directly or indirectly, or more than fifty percent (50%) of the capital stock (or other ownership interest, if not a corporation) of an entity ordinarily having voting rights. “Control” and its derivatives, with respect to nonprofit entities, means the power to elect or appoint more than fifty percent (50%) of the Board of Directors of an entity. See clause 6.1 of the *IEEE-SA Standards Board Bylaws* available at <http://standards.ieee.org/develop/policies/bylaws/sect6-7.html>. For example, the parent corporation of a Submitter, any brother or sister corporation of the Submitter, and any Submitter subsidiary in which the Submitter owns more than 50% are considered Affiliates.

36. *Does the Letter of Assurance bind the Submitter's Affiliates?*

Yes, other than those Affiliates specifically and permissibly excluded in a Letter of Assurance. Note that a Submitter cannot exclude Affiliates if the Submitter has indicated Reciprocal Licensing on an Accepted Letter of Assurance.

Application of LOA to Successors of Essential Patent Claims Covered by LOA

37. *What does the Submitter of an Accepted Letter of Assurance have to do if the Submitter transfers one or more Essential Patent Claims covered by the Letter of Assurance to a third party?*

The Submitter is required to provide notice of an Accepted Letter of Assurance to any assignee or transferee of any Essential Patent Claims covered by the Letter of Assurance. That notice can be provided by notifying the assignee or transferee that the Essential Patent Claims are subject to an Accepted Letter of Assurance or by a general statement in the transfer or assignment agreement that the Essential Patent Claims being transferred or assigned are subject to any encumbrances that may exist as of the effective date of such agreement.

In addition, the Submitter shall require that the assignee or transferee agree to provide the same notice to any subsequent assignees or transferees and require its subsequent assignees or transferees to do the same.

38. *Does the Submitter have any responsibility to ensure that its assignees and transferees provide notice of an Accepted Letter of Assurance to subsequent transferees?*

No. As long as the Submitter provides the required notice to its assignees and transferees and requires that its assignees and transferees agree to provide the required notice and bind its assignees and transferees to the same, the Submitter is not responsible for the actions of any downstream assignees and transferees.

Compliant Implementation

39. *Why does the definition of Compliant Implementation include the phrase “component, sub-assembly, or end-product”?*

Compliant Implementation is defined as “...any product (e.g., component, sub-assembly, or end-product) or service that conforms to any mandatory or optional portion of a normative clause of an IEEE Standard” to reflect how IEEE standards are written and how they are implemented in the marketplace. The examples of any product (“component, sub-assembly, or end-product”) are included for clarity.

40. *Can a Submitter offer a license to an Essential Patent Claim for use only to conform to the IEEE Standard?*

Yes. A Submitter’s commitment is to make available licenses “to make, have made, use, sell, offer to sell, or import any Compliant Implementation that implements the Essential Patent Claims for use in conforming with the IEEE Standard.” Therefore, a Submitter may limit its license to cover only implementations that are created for use in conforming to the IEEE Standard. The Submitter is free to offer a license that is broader than what the policy requires but must make available at least the license required under the policy.

41. *Who determines whether a product is a Compliant Implementation?*

Determination of whether a product is a Compliant Implementation is left to implementers, their customers, Submitters, and, if necessary, courts.

Reasonable Rates

42. *In discussing Reasonable Rates, what is an example of the value that is excluded in the statement: “...excluding the value, if any, resulting from the inclusion of that Essential Patent Claim’s technology in the IEEE Standard”?*

The IEEE-SA Patent Policy states that a “Reasonable Rate shall mean appropriate compensation to the patent holder for the practice of an Essential Patent Claim excluding the value, if any, resulting from the inclusion of that Essential Patent Claim’s technology in the IEEE Standard.” A Reasonable Rate does not include value arising from the cost or inability of implementers to switch from the Essential Patent Claim’s technology included in the standard.

As a hypothetical example, during the development of a standard, a Working Group considers alternatives and makes a decision based on many factors. Suppose two and

only two alternative technologies are available, both patented and both offering the same performance, implementation cost, and all other qualities. Therefore, the value of the two options is exactly the same, although only one will be selected. Any additional value imputed to the selected option because of its inclusion in the standard is excluded.

The policy does not mean that an Essential Patent Claim covering an invention created solely to enhance an IEEE standard can never have value.

43. *In discussing Reasonable Rates, what is an example of the “value of the relevant functionality of the smallest saleable Compliant Implementation”?*

The smallest saleable Compliant Implementation (e.g., a component, sub-assembly or end-product) that practices an Essential Patent Claim may have multiple functions. For example, if a smallest saleable Compliant Implementation implements IEEE Standard 1284™, RS-232 and USB but the Essential Patent Claim relates only to the circuit's IEEE 1284 parallel port function, then the “relevant functionality” is only that IEEE 1284 functionality. The parties should consider the value contributed by the Essential Patent Claim's claimed invention to that relevant functionality.

44. *In discussing Reasonable Rates, what is an example of a “smallest saleable Compliant Implementation that practices the Essential Patent Claim”?*

Determining the smallest saleable Compliant Implementation that practices the Essential Patent Claim is a function both of the claims in the patent and of the product or products that implement a standard. For example, assume a component is a Compliant Implementation of IEEE 802.11™ and practices the Essential Patent Claim. That component is then used in an entertainment system that is then installed into an airplane. In this example, the component is the smallest saleable Compliant Implementation of IEEE 802.11.

45. *In discussing Reasonable Rates, what is an example of considering “...in light of the value contributed by all Essential Patent Claims for the same IEEE Standard practiced in that Compliant Implementation”?*

Many IEEE Standards require the use of multiple Essential Patent Claims to create a Compliant Implementation. If the value of any given Essential Patent Claim is viewed in isolation from other Essential Patent Claims, then the resulting determination of value for that single patent may be inappropriate. For example, suppose a standard requires implementation of 100 Essential Patent Claims of equal value held by 100 Submitters. If each Submitter were to be entitled to a royalty of 2% of the implementation's selling price, then the implementation would never be produced because the total royalties (200% of the implementation's selling price) would exceed any possible selling price. Therefore, when a Submitter and an implementer are considering whether a rate would be a Reasonable Rate, the value of all the Essential Patent Claims should be considered. In practice, the number and value of the Essential Patent Claims and the structure of requested royalties won't be as simple as in the

example. The values of the various Essential Patent Claims may vary; some, for example, may have higher value because they cover important functionality, while others may have a lower value because they address less important functionality. Moreover, it may not be feasible for the parties or a court to identify literally “all” Essential Patent Claims. However, at some point, the parties in a negotiation (or a court in a dispute) can decide that they have sufficient information to make a determination.

46. *In discussing Reasonable Rates, what are some examples of an “explicit or implicit threat of a Prohibitive Order?”*

A patent holder’s request that a court issue a Prohibitive Order against an implementer, who does not have a license, would be an example of an explicit threat. A patent holder’s reminder to an implementer that a Prohibitive Order might be available if the implementer does not agree to the requested rate would be an example of an implicit threat.

47. *In discussing Reasonable Rates, are other considerations allowable in addition to those listed?*

Yes. While the IEEE-SA Patent Policy recommends considerations for use in determining a Reasonable Rate, these considerations are not mandatory. The policy does not prevent parties, courts, or other adjudicators from using other considerations. For example, the policy recommends consideration of license agreements obtained without explicit or implicit threat of a Prohibitive Order (and where the circumstances and resulting license are otherwise sufficiently comparable), but the policy does not prevent consideration of any other licensing agreements. (See also question 42.)

47A. *In the expression “Reasonable Rate”, what does ‘rate’ mean?*

‘Rate’ means compensation, which can take a variety of forms. For example, such compensation could be a percentage of a selling price, a fixed amount per unit, a one-time fee, or another method that the two parties mutually and voluntarily agree to use. (See also question 42.)

Licensing Terms Provided with Letters of Assurance

48. *A Submitter of a Letter of Assurance is permitted to provide a not-to-exceed license fee or rate commitment. What is the purpose of permitting a Submitter to provide a not-to-exceed license fee or rate commitment?*

The purpose of the policy is to facilitate the development of standards that will serve the interests of industry, government, and the public. Relative costs of implementation for different proposed technical approaches in comparison with the relative technical performance increases or decreases of those proposals is a legitimate topic for discussion and a legitimate basis for decision-making in the standards development process. The policy attempts to inform participants of this option as a possible way to

increase certainty and precision in their understanding of relative costs. (See also the answer to question 51.)

49. *Does the IEEE make a judgment about whether any not-to-exceed rates provided with the Letter of Assurance are reasonable or non-discriminatory?*

No. The policy provides a definition of a Reasonable Rate and includes several recommended considerations. However, IEEE takes no position on, and has no responsibility for determining, the reasonableness of disclosed royalty rates.

50. *Is a Submitter of a Letter of Assurance required to provide a not-to-exceed license fee or rate commitment?*

No. The IEEE permits, but does not require, the Submitter to provide not-to-exceed royalty rates or other terms.

51. *Does the IEEE make a judgment about whether any terms provided with the Letter of Assurance are reasonable or non-discriminatory?*

No. The IEEE is not responsible for determining whether any licensing terms or conditions provided in connection with submission of a Letter of Assurance, if any, or in any licensing agreements are reasonable or non-discriminatory. Acceptance of a Letter of Assurance does not imply that the IEEE has made any determination of the foregoing. As stated on the LOA form, to the extent there are inconsistencies between the Letter of Assurance form and any sample licenses, material licensing terms, or not to exceed rates provided with the LOA form, the terms of clause 6 of the *IEEE-SA Standards Board Bylaws* and the Letter of Assurance form shall control.

52. *Can a Submitter demand, as a condition of granting a license to an Essential Patent Claim, a license to a prospective licensee's non-essential patent claims?*

No. A Submitter cannot, as a condition of granting a license to an Essential Patent Claim, require a prospective licensee to grant licenses to patent claims that are not Essential Patent Claims for the referenced IEEE standard. The IEEE-SA Patent Policy, however, does not prevent parties from mutually and voluntarily agreeing to a cross-license covering any patents (e.g., a portfolio license).

53. *Can a Submitter demand a prospective licensee take a license for the Submitter's non-essential patent claims?*

No. A Submitter cannot, as a condition to granting a license to an Essential Patent Claim, require a prospective licensee to take licenses to patent claims that are not Essential Patent Claims for the referenced IEEE standard. The IEEE-SA Patent Policy, however, does not prevent parties from mutually and voluntarily agreeing to a cross-license covering any patents (e.g., a portfolio license).

Prohibitive Orders

54. *The definition of Prohibitive Order says that it includes an “adjudicative directive that limits...” Would that include an order from a court that determines the amount of a reasonable royalty?*

No. An order that merely determines a past or future royalty is not a Prohibitive Order.

55. *Does the IEEE-SA Patent Policy give a patent holder a right to seek a Prohibitive Order?*

No. The policy does not create a right that does not already exist in a specific jurisdiction. Whether and to what extent a Submitter would have a right to seek a Prohibitive Order depends on the law of each specific jurisdiction. An Accepted Letter of Assurance defines the circumstances in which the Submitter has voluntarily agreed not to seek or seek to enforce a Prohibitive Order, even if otherwise permitted in a specific jurisdiction.

56. *Does the IEEE-SA Patent Policy prevent an implementer from raising issues of patent validity, patent infringement, or any other claims or defenses against the Submitter or change the requirements for that litigation?*

No. The policy does not prevent the parties from litigating those issues, and it does not change any jurisdiction’s rules on allocating burdens of proof or production of evidence.

57. *Why does the IEEE-SA Patent Policy text on Prohibitive Orders use the phrase “... by one or more courts...”?*

In some jurisdictions, a single court does not have the authority to decide all issues. For example, a jurisdiction may empower one court to determine patent validity but another court to determine infringement or compensation. The policy was drafted so that it could apply in such a jurisdiction.

58. *What is a first-level appellate review?*

A first-level appellate review is a proceeding conducted by a court at the next-higher judicial level (e.g., a court of appeals or a court of second instance) to review the adjudication of the next-lower body (e.g., a trial court or a court of first instance).

59. *What are some examples that constitute a failure “to participate in, or to comply with the outcome of, an adjudication”?*

A failure to participate in an adjudication occurs, for example, when the prospective licensee is not subject to the jurisdiction of the court(s) with the power to determine and award reasonable compensation to the Patent Holder and does not voluntarily submit to such jurisdiction. Failing to comply occurs, for example, when the

prospective licensee refuses to pay past or future royalties as determined in an adjudication as described in the policy.

60. *What should a Submitter do if it faces an unwilling licensee?*

Whether a party is willing or unwilling is a matter of perspective, and the IEEE does not make any determinations of "willing" or "unwilling". A Submitter who is dissatisfied with the progress of negotiations is not prevented, by its voluntary submission of a Letter of Assurance under the IEEE-SA Patent Policy, from commencing litigation.

Working Groups and LOAs

61. *Can copies of Accepted Letters of Assurance be handed out at a standards development meeting?*

Yes. A participant may provide an Accepted Letter of Assurance to other participants by handing out paper copies of an Accepted Letter of Assurance (including a copy of the sample license or material licensing terms, if provided as part of the Letter of Assurance) or a data file with an image of the Accepted Letter of Assurance as it resides on the IEEE web site.

62. *Can the link to the IEEE web site for an Accepted Letter of Assurance be provided?*

Providing or displaying the IEEE URL for an Accepted Letter of Assurance is also acceptable.

63. *Can the actual Accepted Letter of Assurance be displayed on a screen?*

Yes, but displaying the LOA is not recommended because doing so may lead to impermissible questions or discussion. Nevertheless, displaying the Accepted Letter of Assurance as it resides on the IEEE web site is not a violation of the IEEE-SA Patent Policy provided a participant does not read aloud, present, or answer questions about the displayed Letter of Assurance. (See also question 69.)

64. *Can a Working Group chair provide participants with a list of requested LOAs?*

Yes. The Working Group chair should maintain a list of the requests that the chair (or his/her designee) has made and the date of each request. The chair may make this information available to participants in the Working Group and should make it available to participants upon request.

65. *How does a participant know if a Letter of Assurance has been requested from a particular company?*

A participant may ask the Working Group chair whether he or she has requested an LOA from that company. Accepted Letters of Assurance are available on the IEEE web site.

66. *Can a Working Group discuss the absence of a requested Letter of Assurance?*

The Working Group should not discuss the reasons for the absence of an LOA. The chair or a Working Group participant may state whether there is or is not an Accepted Letter of Assurance in response to the request.

67. *Can a participant make a presentation or answer questions about the not-to-exceed license fee or rate, material licensing terms, or sample license agreement?*

No, except that using one or more not-to-exceed rates as components in a presentation comparing relative costs is acceptable. Further information can be found in [Promoting Competition and Innovation: What You Need to Know about the IEEE Standards Association's Antitrust and Competition Policy](#).

68. *What can standards development groups discuss about Letters of Assurance or submitted license terms?*

Nothing. Note, however, that Accepted Letters of Assurance may be distributed as described in question 61. In addition, using one or more not-to-exceed rates as components in a presentation comparing relative costs is acceptable. Further information can be found in [Promoting Competition and Innovation: What You Need to Know about the IEEE Standards Association's Antitrust and Competition Policy](#).

69. *Doesn't it make sense to discuss license terms as part of an overall evaluation of a proposed technology?*

IEEE-SA standards development meetings consist primarily of engineers who are there primarily to discuss the technical merits of competing solutions. Some knowledge of relative cost is entirely appropriate, and the policy provides for exactly that. But licensing issues can be complex and involve not just technical issues but legal and business issues as well, and those discussions can require a different set of people than are present for the technical meetings.

70. *What do I do if the standards development group launches into a discussion of patent licensing terms?*

A participant should object to, and a Working Group chair shall close down, any discussion that is not permitted under IEEE-SA policies.

71. *What should the chair do if a participant wants to modify the terms of an Accepted Letter of Assurance during the meeting?*

An Accepted Letter of Assurance cannot be modified, either in the meeting or elsewhere. Anyone who wishes to submit an additional Letter of Assurance may do so (although any previous Accepted Letters of Assurance will continue to be available). The chair should instruct the individual to submit a new Letter of Assurance as provided in the [IEEE-SA Standards Board Operations Manual](#). (See also the response to question 77.)

72. *What about conversations in the hallway? Can participants discuss the particulars of license terms there?*

The IEEE-SA regulates what goes on in forums that the IEEE-SA provides, such as meeting rooms and email reflectors. The IEEE-SA has no ability to regulate purely private conduct of its participants. There are some topics that participants should not discuss regardless of where they are (such as prices that each of them as competitors will charge for compliant products). There are other topics that participants shall not discuss in IEEE-SA forums and shall not discuss in immediately adjacent spaces that might reasonably lead outside observers to believe it is just a continuation of the formal meeting. Further information can be found in [Promoting Competition and Innovation: What You Need to Know about the IEEE Standards Association's Antitrust and Competition Policy](#). Please also see *IEEE-SA Standards Board Operations Manual* 5.3.10.

73. *If a Letter of Assurance is submitted without the Submitter having exercised the option of providing a not-to-exceed license fee or rate commitment or other license terms, is it okay for a Working Group participant to request or encourage the Submitter to file an additional Letter of Assurance to provide that information?*

No. Although relative cost comparisons can certainly note the absence of cost information, participants shall not request license fees, terms, or conditions during technical standards-development meetings or in other IEEE-SA forums for technical discussions (such as email reflectors).

74. *What can be discussed about patents in a standards development group meeting or in an IEEE-SA email reflector?*

You can discuss the technical merits of using the technology included even if it is included within a potential Essential Patent Claim. You can discuss and compare the relative costs of technology claimed in potential Essential Patent Claims. You must not discuss subjects such as how a patent should be licensed, or essentiality, validity, or interpretation of a patent claim. These are not appropriate topics for discussion in a standards development committee. Further information can be found in [What You Need to Know About IEEE Standards and the Law](#). Please also see *IEEE-SA Standards Board Operations Manual* 5.3.10.

75. *Can someone submit a different Letter of Assurance for different Essential Patent Claims within the same standard?*

Yes. A Submitter may submit separate Letters of Assurance providing its licensing positions for different potential Essential Patent Claims.

76. *If a person submits a Letter of Assurance but doesn't identify a specific Essential Patent Claim covered by the Letter of Assurance, are the assurances binding on all of the Essential Patent Claims on the same IEEE Standard owned by the Submitter?*

Yes, except for any Essential Patent Claims identified in a previously or simultaneously submitted Accepted Letter of Assurance for the same IEEE Standard. (See also question 82.)

77. *Can a Submitter change the terms of the assurance it has given after an LOA has been accepted by the IEEE? For example, what if the Submitter decided to lower the not-to-exceed price it would offer to license for an Essential Patent Claim?*

A Letter of Assurance is irrevocable once submitted and accepted and shall apply, at a minimum, from the date of the standard's approval to the date of the standard's transfer to inactive status. Thus, a Submitter cannot change the terms of an Accepted Letter of Assurance for a particular Essential Patent Claim once it is accepted. However, over time, a Submitter may provide multiple assurances for a given Essential Patent Claim by submitting multiple Letters of Assurance for such claim, each of which shall be binding on the Submitter. Each potential licensee may choose to invoke the terms of any applicable Letter of Assurance accepted by the IEEE. Thus, the Submitter desiring to lower the not-to-exceed price that it would offer for licensing its Essential Patent Claim can submit an additional Letter of Assurance with the revised not-to-exceed price and each potential licensee may choose to invoke the terms of either Letter of Assurance.

Reciprocal Licensing

78. *Many IEEE Standards have amendments and corrigenda and are revised every ten years. How does the selection of Reciprocal Licensing work in these situations?*

Reciprocity is based on licensing Essential Patent Claims "for the referenced IEEE Standard, including any amendments, corrigenda, editions, and revisions." If a Submitter checks the box selecting Reciprocal Licensing, the scope of that Reciprocal Licensing for both the Submitter and the Applicant is the entire IEEE Standard. Please also note section 6.3.5 of the *IEEE-SA Standards Board Operations Manual, Applicability of Letters of Assurance to Amendments, Corrigenda, Editions, or Revisions*. (See also questions 14 and 15.)

79. *Can a Submitter select Reciprocal Licensing while excluding specific Essential Patent Claims from its licensing commitment?*

No. When a Submitter checks the Reciprocal Licensing box, neither the Submitter nor the Applicant can exclude from its licensing commitment to the other party any Essential Patent Claims for the referenced IEEE standard.

80. *Why can't a Submitter exclude its Affiliates when demanding Reciprocal Licensing?*

In situations similar to those described in question 79, Essential Patent Claims might not be available for licensing if they are owned by an excluded Affiliate. Since the Applicant has no ability to exclude any Affiliate or any Essential Patent Claims held by such Affiliate, the same limitation must be applied to the Submitter.

Blanket Letter of Assurance

81. *What is a "Blanket Letter of Assurance"?*

A Blanket Letter of Assurance is a Letter of Assurance referencing a standard or project that applies to all Essential Patent Claims for which a Submitter may currently or in the future (except as otherwise provided for in the [IEEE-SA Standards Board Bylaws](#) and in the [IEEE-SA Standards Board Operations Manual](#)) have the ability to license. This is defined in clause 6.1 of the *IEEE-SA Standards Board Bylaws* available at <http://standards.ieee.org/develop/policies/bylaws/sect6-7.html>.

82. *What happens if the Submitter submits a Blanket Letter of Assurance after previously offering a specific Letter of Assurance?*

If a Submitter has signed and submitted a Letter of Assurance specifically identifying an Essential Patent Claim before or concurrently with signing and submitting a Blanket Letter of Assurance, the Blanket Letter of Assurance cannot be invoked as to the specified Patent Claim.

83. *Does a Blanket Letter of Assurance apply to Essential Patent Claims that my company acquires after submitting the Letter of Assurance?*

Yes, unless the acquired entity or the prior holder of the acquired Essential Patent Claim has submitted a Letter of Assurance before the acquisition. Any Blanket Letter of Assurance submitted by the acquired entity or the prior holder of the acquired Essential Patent Claim before the acquisition, shall continue to apply to acquired Essential Patent Claims covered by such assurance (but not to the acquirer's Essential Patent Claims). An acquiring party can ask a seller of an acquired Essential Patent Claim or an acquired entity to submit additional Letters of Assurance before closing of the acquisition. See *IEEE-SA Standards Board Operations Manual* clause 6.3.4.

Implementation of updated IEEE-SA Patent Policy

84. *What is the effective date of the updated IEEE-SA Patent Policy?*

The effective date of the updated IEEE-SA Patent Policy set forth in the [IEEE-SA Standards Board Bylaws](#) and [IEEE-SA Standards Board Operations Manual](#) is 15 March 2015.

85. *Will the updated IEEE-SA Patent Policy apply to existing standards development projects currently underway as well as new standards development projects?*

The updated policy will apply to any LOAs (for any project or standard) submitted on or after the effective date. (See also question 84.)

86. *Is the Submitter of an Accepted LOA required or expected to submit a new LOA on the current IEEE-SA Standards Board approved Letter of Assurance form whenever the IEEE-SA Patent Policy is updated?*

No.

87. *Is it permissible for a Submitter of an Accepted LOA to voluntarily submit an additional LOA on the current IEEE-SA Standards Board approved Letter of Assurance form whenever the IEEE-SA Patent Policy is updated?*

Yes. (See also questions 71 and 77.)

Essential Patent Claims during Ballot Resolution

88. *During ballot resolution, what should be the response to a comment regarding the lack of an LOA?*

If an LOA has not been requested from the indicated holder of a potential Essential Patent Claim, the process for requesting an LOA should be followed (See [6.3.2 Call for patents](#) in the [IEEE-SA Standards Board Operations Manual](#)).

Furthermore, the IEEE is not responsible for the following, and the comment response should so state:

- Identifying Essential Patent Claims for which a license may be required
- Determining the validity, essentiality, or interpretation of Patent Claims;
- Determining whether any licensing terms or conditions provided in connection with submission of a Letter of Assurance, if any, or in any licensing agreements are reasonable or non-discriminatory;
- Determining whether an implementation is a Compliant Implementation.

(Taken from the subclause 6.2 *Policy* of the *IEEE-SA Standards Board Bylaws*)

and that no discussions or other communications regarding the

- Essentiality of patent claims
- Interpretation of patent claims
- Validity of patent claims

shall occur during IEEE-SA Working Group standards-development meetings or other duly authorized IEEE-SA standards-development technical activities.

(Note: This is not a complete list of the items for non-discussion. Adapted from [5.3.10.2 Discussion of litigation, patents, and licensing](#) of the *IEEE-SA Standards Board Operations Manual*).