

# **IHFC Standardization Working Directives**

**International Hydrogen Fuel Cell Association Standardization Working**

**Committee**

**May 2024**



## Contents

|   |   |    |
|---|---|----|
| 1 | General.....  | 1  |
| 2 | Standardization Organizations .....   | 2  |
|   | 2.1 Decision-making Body .....  | 2  |
|   | 2.2 Management and Coordination Agency.....   | 3  |
|   | 2.3 Standards Development Agencies.....   | 3  |
| 3 | Standard Formulation and Revision .....   | 5  |
|   | 3.1 Overview .....  | 5  |
|   | 3.2 Proposal .....  | 5  |
|   | 3.3 Project Establishment .....   | 5  |
|   | 3.4 Drafting.....   | 6  |
|   | 3.5 Solicit Opinions .....  | 6  |
|   | 3.6 Review .....  | 7  |
|   | 3.7 Approval and Release .....  | 7  |
|   | 3.8 Review .....  | 8  |
|   | 3.9 Numbering Rules .....   | 8  |
|   | 3.10 Archive.....   | 9  |
| 4 | Intellectual Property Policy .....  | 10 |
|   | 4.1 Patent Policy .....   | 10 |
|   | 4.2 Copyright Policy .....  | 12 |
| 5 | Management of Funds for Standard Formulation and Revision .....                         | 13 |
|   | 5.1 Funding Type .....  | 13 |
|   | 5.2 Funding.....  | 13 |
| 6 | Appeals .....   | 14 |
|   | Appendix A IHFCA Standards Review Points .....  | 15 |
|   | Appendix B Standard Development Process Documents .....                                 | 17 |
|   | Appendix 1 IHFCA Standard Project Application Form .....                                | 18 |
|   | Appendix 2 IHFCA Standards Comments Summary Table.....                                  | 19 |
|   | Appendix 3 IHFCA Standard Approval and Issuance Form.....                               | 20 |
|   | Appendix 4 IHFCA Standard Essential Patent Information Disclosure Form.....             | 21 |
|   | Appendix 5 IHFCA Standard Essential Patent Implementation License Declaration Form..... | 23 |
|   | Appendix 6 IHFCA Standardization Work Appeal Form .....                                 | 25 |



## **1 General**

**1.1** The International Hydrogen Fuel Cell Association (IHFCFA) is a non-governmental scientific and technological organization. In order to standardize the full life cycle management of the International Hydrogen Fuel Cell Association standards (referred to as IHFCFA standards) and promote the accelerated development and widespread application of innovative technologies in the hydrogen energy and fuel cell industries, the directives formulated in accordance with the Charter of the International Hydrogen Fuel Cell Association.

**1.2** The IHFCFA standard is a technical document jointly developed by the International Hydrogen Fuel Cell Association and coordinated by its members for voluntary use by association members and society.

**1.3** The IHFCFA standard is committed to promoting the development and widespread application of global hydrogen energy and fuel cell technology, and helping to achieve the global carbon neutrality goal.

**1.4** The formulation and revision of IHFCFA standards follow the principles of transparency, openness, justifiableness and consensus, non-discrimination, and promotion of trade and exchanges, and focus on the realization of the United Nations' sustainable development goals such as clean energy and climate action.

**1.5** The working language for IHFCFA standardization activities is English. Translation services are not provided. All IHFCFA standards are published in English, versions in other languages may be made available based on member requests.

**1.6** This directive has been reviewed and approved by the Standardization Working Committee of IHFCFA and shall come into effect on the date of publication. The IHFCFA Secretariat is responsible for its interpretation.

## **2 Standardization Organizations**

Under the supervision of the Executive Council of IHFCA, a three-level working system will be established, including a decision-making body, a management and coordination body, and a standards development body.

### **2.1 Decision-making Body**

**2.1.1** The Standardization Working Committee serves as the decision-making body for IHFCA's standardization works. It is a permanent organization under the supervision of IHFCA's Standing Executive Board and coordinates all standardization activities.

**2.1.2** The Standardization Working Committee invites well-known experts and scholars from the global hydrogen and fuel cell industry and academia to serve as its chairman and vice chairman, Committee members are nominated by IHFCA's Executive Board and by members that have made outstanding contributions to standardization work.

**2.1.3** Responsibilities of the Standardization Working Committee include:

- a) Consulting on and making decisions regarding critical issues of IHFCA's standardization development strategy;
- b) Approving the establishment, change or dissolution of technical committees, proposal committees and other standard technical organizations;
- c) Reviewing IHFCA standard technical documents.

**2.1.4** The presidency of the Standardization Working Committee rotates every two years.

**2.1.5** The Standardization Working Committee is supported by a secretariat, which includes a Secretary-General and several Deputy Secretaries-General.

## **2.2 Management and Coordination Body**

**2.2.1** The International Hydrogen Fuel Cell Association Secretariat should staff full-time standardization personnel to manage and coordinate IHFCA's standards work, including:

- a) Implementing decisions of the Standardization Working Committee and drafting various policy and procedural documents related to IHFCA standardization work.
- b) Managing IHFCA's standard development and revision projects.
- c) Branding the IHFCA standard and organizing the publicity and promotion of IHFCA standards.
- d) Facilitating external communication and cooperation concerning the IHFCA standard.
- e) Collecting and providing feedback on standardization work suggestions and opinions from relevant stakeholders.
- f) Executing tasks assigned by associations and standardization working committees.

## **2.3 Standards Development Body**

### **2.3.1 Standard Drafting Body**

**2.3.1.1** The drafting working group is responsible for the drafting, promoting, and evaluating the application and implementation effects of specific standards.

**2.3.1.2** Establishment of the drafting working group:

a) Established, maintained or dissolved with the establishment, implementation and completion of the standard development and revision project;

b) In principle, the leading unit shall be the initiator of the standard project. In special circumstances, the association may authorize and entrust relevant institutions to undertake the

leading unit.

**2.3.1.3** The drafting working group members should encompass a wide range of stakeholders, including producers, operators, users, consumers, scientific research institutions, testing and certification agencies, government regulatory departments, etc.

### **2.3.2 Standards Review Bodies**

**2.3.2.1** Based on the needs of standard development, a standard review group is established, maintained or dissolved in terms of technical direction as the standard development and revision project is established, implemented and completed.

**2.3.2.2** The review group is typically composed of not less than 7 technical experts, including producers, operators, users, representatives of public interest, and other stakeholders globally.

IHFCA Standardization Working Directives



### **3 Standard Development and Revision**

#### **3.1 Overview**

The IHFCA standard development and revision process mainly includes proposal, project establishment, drafting, enquiry, review, and publication. The development and revision cycle is generally 18 months.

#### **3.2 Proposal**

**3.2.1** The standard proposal was jointly put forward by not less than three hydrogen energy or fuel cell related entities.

**3.2.2** The proposal document should include:

- a) Draft standards;
- b) "IHFCA Standard Project Application Form" (refer to Appendix 1);

#### **3.3 Project Establishment**

**3.3.1** The IHFCA Secretariat shall conduct a preliminary review of the project application materials, including the completeness of the application materials, the normativity of the text, the rationality of the standardization object, the universality of the application, etc. If the preliminary review is passed, a technical meeting for project establishment will be held for review.

**3.3.2** The review group shall be responsible for the review of the project technical meeting.

During the meeting review, thorough discussions should be held on the technical merit of the application materials, including technological advancement, innovation and urgency, and consensus should be reached as much as possible. If a vote is required, approval must be obtained with at least two-thirds (2/3) of the participating members.

The drafting team members shall not undertake the review work. If the project is approved by the

project establishment technical meeting, the comprehensive project establishment meeting shall be held for review.

**3.3.3** Based on the review opinions and relevant meeting conclusion materials submitted by the Executive Secretary, the Association's Secretariat will review the project application materials and members' opinions again. A final project conclusion will be formed and disclosed publicly in the form of meeting minutes.

**3.3.4** The Secretariat will promptly disclose information on standard development and revision projects on the IHFCA's official website.

### **3.4 Drafting**

**3.4.1** The drafting working group is responsible for the technical content of the draft standard.

**3.4.2** During the standard drafting process, in-depth investigation and analysis will be carried out, and experimental verification of necessary indicators will be carried out based on the summary of scientific and technological research results and industry practice experience.

**3.4.3** IHFCA standards should be written in accordance with the IHFCA Standards Template, which specifies the name, structure, selection and expression of elements of the standard content.

**3.4.4** While drafting the draft standard, the "IHFCA Standard Compilation Description " should be prepared, focusing on the basis for determining and verifying the main technical contents of the standard.

**3.4.5** Any patent issues arising from the technical content of the standards shall be addressed in accordance with Section 4.1 of the Directive.

### **3.5 Solicit Opinions**

**3.5.1** Opinions may be solicited through public online solicitation, letter solicitation or meeting solicitation.

The Association Secretariat publishes the notice for soliciting opinions on the standard project on the official IHFCA website (www.ihfca.net), and solicits opinions on the draft standard and the compilation instructions. At the same time, the drafting working group should solicit opinions from members and relevant parties such as producers, operators, users, and public interests through letters and meetings.

The period for soliciting opinions is generally not less than 30 days. The members and individuals whose opinions are solicited should submit written opinions within the specified time. If the opinions are major, they should be accompanied by explanations or argumentation materials.

**3.5.2** The drafting working group shall carefully handle the feedback received and fill in the "IHFCA Standards Opinion Collection Processing Form" (refer to Appendix 2), and clearly state the reasons for not adopting the opinions. The standard project leader is responsible for organizing the processing of opinions and standard revisions.

**3.5.3** The draft standard for soliciting opinions is modified to form the draft standard for review.

### **3.6 Review**

**3.6.1** The review will be conducted in the form of a meeting and will be led by the review group. Detailed review points can be found in Appendix A.

**3.6.2** The review conclusions include "recommended for approval", "resubmit for review after modification", and "suspended".

**3.6.2** The draft for approval will be formed after passing the review.

### **3.7 Approval and Publication**

**3.7.1** The IHFCA standard draft for approval shall be submitted to the Standardization Working Committee for review. It shall be valid only if no less than 1/2 of the members participate in the voting. It shall be passed if more than 2/3 of the valid votes are in favor.

**3.7.2** After approval, the Association Secretariat will publish the draft standard and the standard preparation instructions on the IHFCA official website for 15 days. For standards that involve or may involve patents, the known patent information should also be published.

**3.7.3** After the public announcement, the association's secretariat will organize and summarize the opinions collected on the standard project and carry out related work.

a) For those with basically no objection, the standard shall be numbered according to the numbering rules (refer to 3.9), and the "IHFCA Standard Approval and Issuance Form" (refer to Appendix 3) shall be filled in and submitted to the Secretary-General of the Association for approval and issuance.

b) In case of general objections, a revision notice shall be issued to the drafting working group and the draft shall be reviewed again in accordance with 3.6 of this document.

c) For standards with major objections, after thoroughly considering feedback from all members and related entities, propose modifications, termination, or conversion to a guidance document for publication. These proposals once approved by the Secretary-General, will be implemented.

### **3.8 Reexamination**

After the IHFCA standard is released and implemented, the association secretariat should organize a review based on the technical development needs of the relevant professional fields. The review cycle is generally 5 years. The technical content of the standard should be revised in a timely manner to ensure the scientific nature of the technical content.

### **3.9 Numbering Rules**

**3.9.1** The numbering format of IHFCA standard documents is "IHFCA Standard Sequence Number

- Year Number":

- a) "IHFCFA": the code name of the association;
- b) "Standard Sequence Number": use natural number sorting starting from 1;
- c) "Year": The year in which the standard is first published or revised.

Example: The standard number is IHFCFA 7-2024, which means that the serial number of this IHFCFA standard is 7 and the release time is year 2024.

**3.9.2** Standards mutually recognized by the association and other associations or standards jointly developed are double-numbered, as follows.

a) For standards mutually recognized by the association and other associations, the standards are numbered as "IHFCFA standard number/other association standard number (IDT)" or "IHFCFA standard number/other association standard number (EC)" according to the degree of consistency with the standard documents of other associations (IDT means equivalent mutual recognition, EC means editorial changes).

b) For jointly developed and jointly issued standards, the number is "IHFCFA standard number/other association standard number", and the names of the association and other associations are listed side by side in the publication position on the cover of the standard.

### **3.10 Archive**

The Association's Secretariat shall archive and manage all types of documents related to the Association's standardization activities, and the archive period shall not be less than ten years.

## **4 Intellectual Property Policy**

### **4.1 Patent Policy**

#### **4.1.1 Basic principles**

To facilitate the integration of scientific and technological innovations into standards, encourage innovation, and support the adoption of patented technologies in IHFCA standards, the association's basic principles for handling patents related to standards include:

——Facilitating the absorption of advanced patented technologies into standards to promote technological progress.

——Supporting the implementation and dissemination of standards.

#### **4.1.2 Disclosure of Essential Patent Information**

**4.1.2.1** At any stage of the formulation and revision of IHFCA standards, organizations or individuals involved in the formulation and revision of standards should disclose to the association as early as possible the necessary patents (patents that must be used when implementing the standards, the same below) owned by themselves, their affiliates and other persons (parties) known to them.

**4.1.2.2** The association encourages organizations or individuals that are not involved in the formulation and revision of IHFCA standards to disclose the essential patents they own or are aware of at the earliest opportunity.

**4.1.2.3** Disclosure should include the patent name, patent owner/applicant, standard terms involving the patent, etc. The disclosure must be submitted using the "IHFCA Standard Essential Patent Information Disclosure Form" (refer to Appendix 4), along with relevant patent information and corresponding supporting materials. The submitter is responsible for the authenticity of the information provided.

**4.1.2.4** If any party clearly violates the principle of good faith, fails to disclose relevant patents in a timely manner as required, or discloses irrelevant patents maliciously, the association reserves the right to revoke their eligibility to participate in the formulation and revision of IHFCA standards, depending on the specific circumstances.

**4.1.2.5** It is encouraged for relevant organizations or individuals to disclose patent information through the IHFCA official website.

### **4.1.3 Necessary Patent Implementation License Statement**

**4.1.3.1** Organizations or individuals who participate in the formulation and revision of standards and hold patents involved in the standards shall make a commitment to the association and submit a patent implementation license statement; for organizations or individuals who do not participate in the formulation and revision of IHFCA standards and hold patents involved in the standards, the association will notify the patent owner upon learning of the patent and request them to make a commitment and submit a patent implementation license statement within one month.

**4.1.3.2** When submitting a patent implementation license statement, the declarant should complete the "IHFCA Standard Essential Patent Implementation License Declaration Form" (refer to Appendix 5) and choose exclusively one for the following licensing options:

a) License under the principles of Fair, Reasonable, and Non-Discriminatory terms and Royalty-Free (FRAND-RF);

b) License on Fair, Reasonable, and Non-Discriminatory (FRAND) basis;

c) Decline to license.

**4.1.3.3** When the patent owner's choice is 4.1.3.2 c) , the standard should not include any clauses based on this patented technology.

### **4.1.4 Information Release**

At any stage of standard development and revision, the identified patent information should be published in a timely manner. When the patent information involved in the standard changes, it should be disclosed to the public in a timely manner. The association will disclose the information on patents involved in the standard to the public in a timely manner through the IHFCA official website and other appropriate channels.

## **4.2 Copyright Policy**

**4.2.1** The Association holds the copyright ownership of the IHFCA draft and final standard texts.

**4.2.2** The Association requires drafting working group members to respect the intellectual property rights of others during the formulation, revision and implementation of standards. When adopting standards or technical specifications issued by other standard organizations, drafting working group members should abide by the intellectual property policy of the organization and use them only after obtaining authorization.

**4.2.3** Copyrighted materials submitted by drafting working group members for the purpose of standard development are considered authorized for use in IHFCA standards unless explicitly marked or stated otherwise by the contributors. Once the material is finally adopted by the IHFCA standard text, the association is granted the right to use the material in the form of copying, modification, etc. for the purpose of making and publishing the standard text worldwide. This authorization is permanent, irrevocable, non-exclusive and royalty-free.

If the drafting working group members are aware that the submitted materials include third-party copyright, they must inform the Association Secretariat when submitting the materials.

**4.2.4** The name, number, introduction and other basic information of the IHFCA standard shall be made public through the IHFCA official website.

**4.2.5** In principle, IHFCA standard documents should be published by a publisher designated by the Association.



No organization or individual is allowed to publish or distribute all or part of the draft or final standard, or any other form of derivative work, without the written permission from the association.

Reproducing, selling, or reselling IHFCA standards in any form without the permission of the Association is prohibited.

## **5 Management of Funds for Standard development and Revision**

### **5.1 Funding Type**

**5.1.1** The funds for standard development and revision mainly include standard development costs and standard daily management costs:

a) Standard development costs refer to special funds used for standard project establishment, drafting, technical review, publication and promotion, etc., mainly including test verification costs, meeting fees and necessary expert consultation fees involved in the standard development process, as well as promotion and training costs after the standard is released.

b) Standard daily management expenses refer to the ongoing efforts needed to advance the IHFCA standards, including the expenses for research, meetings, publicity, promotion, and distribution of standard texts. These costs are included in the daily office budget of the Association's Secretariat.

**5.1.2** The standard leading unit should clearly state the overall budget, specific fund-raising methods and use plan for the funds needed for standard development in the project application, as an important part of the project review and evaluation, and put it on record for implementation after approval. This ensures "advance budgeting, coordinated funding and expenditure, and dedicated funds for specific purposes".

### **5.2 Funding**

In principle, the cost of standard development shall be jointly raised by all members involved in the formulation and revision of the standard. Research and test verification costs shall be allocated

to specific members according to the division of work tasks and after full communication and agreement among the participating members. In principle, they shall not be centrally managed and used. Meeting fees, travel expenses and necessary expert consultation fees, as well as the costs of publishing, publicity and training after the release of the standard, shall be shared and raised by all members and centrally managed and used after full communication and agreement among the participating members according to the budget plan.

## **6 Appeals**

Entities leading the standard drafting, members of the drafting workgroup, and other relevant parties have the right to appeal to the Standardization Working Committee concerning any contentious decisions made during the standardization process. The Standardization Working Committee shall accept the appeal within 15 days, conduct necessary investigations, communications, and coordination from the day after the decision is accepted, and submit a final mediation report, which shall be publicly released and sent to the complainant.

## Appendix A IHFCA Standard Revision and Formulation Review Points

### A.1 Key points for review during the standard establishment phase:

- a) Necessity: clarify define the purpose and significance of standard setting, and clarify the urgency and importance of the standard;
- b) Feasibility: The research foundation is solid, the technical route is feasible, the standard technical content is verifiable and operational, the development schedule is reasonable, and the application and promotion plan are clear and feasible;
- c) Advancement: The technology or method in the standard is advanced and innovative. The technology and method adopted in the standard are forward-looking and can reflect the latest scientific research results and industry development trends;
- d) Coordination: Coordinate with international standards and existing (published and under-development) IHFCA standards to avoid conflicts and duplications between standards;
- e) Applicability: The standard can meet the actual needs of technological development in this field, can effectively solve corresponding problems, and can be effectively implemented and widely used in the expected application scenarios;
- f) Normativity: The first draft of the standard is drafted in accordance with the requirements of the IHFCA Standard Template, clearly defining the standardization object and scope, and standardizing the standard structure; whether the patent disclosure is true and whether it involves other patents;
- g) Resource and Capability Foundation: The applicant's strength in human resources, technical capabilities, test and verification capabilities, fund-raising capabilities, industry influence, organizational appeal, etc.

### A.2 Key points for review during the standard review phase:

- a) Reasonableness: whether the technical content of the draft standard is reasonable, scientific, practical and operable;
- b) Conformity: whether the main technical content of the standard is consistent with the content of the project plan;
- c) Text standardization: whether the framework structure of the standard is reasonable and

the content is complete; whether the text of the draft for review is standardized; whether the content of the compilation instructions is reasonable and whether the process results described are consistent with the technical content of the text;

- d) Process standardization: whether the standard development process is rigorous and standardized; whether the patent disclosure is true and whether it involves other patents;
- e) Extensiveness: The drafting participants should cover producers, operators, users, consumers, scientific research institutions, testing and certification agencies, government departments and other relevant parties as much as possible; whether the opinions solicited are extensive and representative, and whether all the opinions are properly handled;
- f) Promotion feasibility: whether the standard application promotion plan is feasible.

**A.3** Key points for review during the standard review phase:

- a) Coordination: whether the technical content of the standard has been included in the published and under-developed international standards, or whether there is much overlap in the content;
- b) Advancement: whether the content of the standard is influential and leading to the industry, whether the scope of application of the standard can cover new products, new processes, and new services, and whether the technical level of the standard is higher than the average level of current market or industry technology development;
- c) Normativity: whether the technical content of the standard is verifiable and operable;
- d) Timeliness: Whether the standards and normative referenced documents adopted by the standard are currently valid.

## **Appendix B Standard Development Process Documents**

The following documents can be downloaded from the IHFCA official website: [www.ihfca.net](http://www.ihfca.net)

IHFCA Standardization Working Directives

Appendix 1 IHFCA Standard Project Application Form

IHFCA Standard Project Application Request

|  |  |  |  |
|--|--|--|--|
| Item Number  |  | Project Type                             |  |
| Project Name   |  |  |  |
| President of the Drafting Working Group  |  | Contact Information                      |  |
| Drafting Working Group Members   |  |  |  |
| Formulate/Revise   | <input type="checkbox"/> Formulate<br><input type="checkbox"/> Revise  | Standard Number Being Revised            |  |
| Whether It Involves Patents  | <input type="checkbox"/> Yes <input type="checkbox"/> No   | Planned Start and End Time               |  |
| Proposed Scope of Application of the Standard                                      |  |  |  |
| Does The Completion of This Standard Depend on the Completion of Another Standard? | <input type="checkbox"/> Yes (If Yes, Explain How This Standard Depends on the Completion of Another Standard )<br><br><input type="checkbox"/> No |  |  |
| Purpose Statement of Project Establishment   |  |  |  |
| Standard Project Contents Summary  |  |  |  |
| Signature of the Applicant   |  | Official Seal of The Applicant’s Company |  |

Appendix 2 IHFCA Standards Comments Summary Table

IHFCA Standards Comments Summary Table

project name:

Development and drafting task number:

Lead Unit:

Organizer:

Telephone:

No. Year Month Date  
Page / Total Page

| Serial number | Article number | Content of opinion | Proposing Entities | Processing opinions and reasons |
|---------------|----------------|--------------------|--------------------|---------------------------------|
| 1             |                |                    |                    |                                 |
| 2             |                |                    |                    |                                 |
| 3             |                |                    |                    |                                 |
| ...           |                |                    |                    |                                 |

illustrate: ① Number of members (or copies) to which the "Draft for Comments" is sent: \_\_\_\_\_

② Number of members (or copies) of reply letters: \_\_\_\_\_; Number of members (or copies) that have not responded: \_\_\_\_\_

③ The number of members (or copies) that replied and made suggestions or comments:

Appendix 3 IHFCA Standard Approval and Issuance Form

IHFCA Standard Approval Issuance Sheet

|   |   |                           |  |                            |  |
|---|---|---------------------------|--|----------------------------|--|
| Project Name and Task Book Number   | Project Name:<br>Development and Drafting Task Number:  |                           |  |                            |  |
| Project Type  | <input type="checkbox"/> Standard system <input type="checkbox"/> Series Standards <input type="checkbox"/> Single standard<br><input type="checkbox"/> Technical specifications                            |                           |  |                            |  |
| Corresponding Specifications System Status  | <input type="checkbox"/> None yet <input type="checkbox"/> Under preparation <input type="checkbox"/> Already exists, but needs to be revised<br><input type="checkbox"/> Already exists, no need to revise |                           |  |                            |  |
| Formulate or Revise   | <input type="checkbox"/> Formulate<br><input type="checkbox"/> Revision   | Revised standard encoding |  | New Standard Serial Number |  |
| Lead Unit   | Name:   |                           |  | Project Start and End Time |  |
|   | Contact:  |                           |  |                            |  |
|   | Contact information (phone, email)  |                           |  |                            |  |
| Participating Members   |   |                           |  |                            |  |
| Development and Drafting Work Process Main Time Points                                    |   |                           |  |                            |  |
| Submit Documents List   |   |                           |  |                            |  |
| International Hydrogen Fuel Cell Association Secretariat<br>(Signature and official seal) |   |                           |  |                            |  |
| Year    Month    Date   |   |                           |  |                            |  |



Appendix 4 IHFCA Standard Essential Patent Information Disclosure Form

IHFCA Standard Essential Patent Information Disclosure Form

| Standard Information                                  |                                   |             |   |   |   |
|---|-----------------------------------|-------------|---|---|---|
| Project Name  |                                   |             | Development and Drafting Task Book Number |   |   |
| Patent Discloser Information                          |                                   |             |   |   |   |
| <input type="checkbox"/> Personal                     | Name                              |             | Employer                                  |   |   |
| <input type="checkbox"/> Entity                       | Company Name                      |             |   | Contact   |   |
| Contact Address                                       |                                   |             |   |   |   |
| Postal Code   |                                   | Telephone   |   | E-mail  |   |
| Necessary Patent Information Involved in the Standard |                                   |             |   |   |   |
| Serial Number   | Patent Application No / Patent No | Patent Name | Patent Applicant / Patentee               | Standard Clauses Involving Patents (Chapter and Article Number) | Do you agree to make an implementation license statement? |
|   |                                   |             |   |   |   |
|   |                                   |             |   |   |   |

|   |
|---|
| <p>Patent Discloser (Signature / Seal):</p> <p style="text-align: right;">Year      Month      Date</p>   |
| <p>Instructions for filling out the form: The discloser of patent information can be an individual or an organization. Please choose to fill in the form.</p> |

IHFCA Standardization Working Directives

## Appendix 5 IHFCA Standard Essential Patent Implementation License Declaration Form

## IHFCA Standard Essential Patent Implementation License Declaration Form

| <b>Standard Information</b>  |                                   |             |   |  |  |
|--|-----------------------------------|-------------|---|--|--|
| Project Name   |                                   |             | Development and Drafting Task Book Number |  |  |
| <b>Patentee/Patent Applicant Information</b>   |                                   |             |   |  |  |
| <input type="checkbox"/> Personal  | Name                              |             |   | Employer   |  |
| <input type="checkbox"/> Entity  | Company Name                      |             |   | Contact  |  |
| Contact Address  |                                   |             |   |  |  |
| Postal code  |                                   | Telephone   |   | E-mail   |  |
| <b>Declaration of Licensing of Essential Patents Involved in the Standard</b>  |                                   |             |   |  |  |
| <p>When and only when the claims in the patents of this patent owner or patent applicant listed in the following table become necessary claims of the final published International Hydrogen Fuel Cell Association standard (IHFCA standard), the patent owner or patent applicant shall make the following implementation license statement:</p> <p>a) The patent owner or patent applicant agrees to grant free license to any organization or individual to implement the patent when implementing the standard on a fair, reasonable and non-discriminatory basis; (Note: The patent owner / patent applicant may make the above statement under reciprocal or defensive termination conditions.)</p> <p>b) The patent owner or patent applicant agrees to license any organization or individual to implement the patent in the implementation of the standard for a fee on a fair, reasonable and non-discriminatory basis; (Note: The patent owner / patent applicant may make the above statement under reciprocal or defensive termination conditions.)</p> <p>c) The patent owner or patent applicant does not agree to the patent implementation license in the above two ways.</p> |                                   |             |   |  |  |
| Serial number  | Patent Application No / Patent No | Patent Name | Necessary Claims                          | Implementation Permission Statement Method [a) , b) or c)] |  |

|   |  |  |  |  |
|---|--|--|--|--|
|   |  |  |  |  |
|   |  |  |  |  |
| <p>Patent owner / patent applicant (signature / seal):</p> <p>Year      Month      Date</p> |  |  |  |  |

IHFCA Standardization Working Directives

Appendix 6 IHFCA Standardization Work Appeal Form

IHFCA Standardization Work Appeal Form

|  |  |
|--|--|
| <b>Appeler's information</b> (including contact information and signature):        |  |
| <b>Information of the respondent people/committee</b> (including contact details): |  |
| <b>Appeal Request</b><br>(i.e. the matter of appeal)                               |  |
| <b>Facts and Reasons</b>   |  |
| <b>List of Evidence Materials</b>  |  |

Time of filing the complaint: Year      Month      Date