

**《二〇二一年度國家技術發明獎申請書》填寫說明**  
**Notes on How to Complete the Application Form**  
**for the 2021 State Technological Invention Award**

本申請書適用於國家技術發明獎在香港特別行政區之申請事宜。申請書是香港特別行政區政府創新科技署及評審委員會的基本技術文件和主要依據，必須嚴格按規定的格式、欄目及所列標題如實、全面填寫。

This Application Form is for the nomination of the State Technological Invention Award in the Hong Kong Special Administrative Region (HKSAR). The Application Form serves as the basic technological document in the evaluation of the State Science and Technology Awards as well as the primary basis on which such evaluation is to be conducted by the Innovation and Technology Commission (ITC) of the HKSAR Government and the Judging Panel. Filling in accurate and full information strictly in accordance with the prescribed formats, columns and headings is required.

**I. 項目基本情況**  
**General Description of the Project**

1. **《項目名稱》**應當簡明、準確地反映出項目的主要技術發明內容和特徵，字數（含符號）中文不超過 30 字，英文不超過 200 個字符。

**“Project Title”** requires information to reflect precisely and accurately the content and characteristics of the major technological inventions of the project. The project title should not exceed 30 words (including symbols) in Chinese and 200 characters (including symbols) in English.

2. **《主要完成人》**獲特區政府推薦的國家科學技術獎候選人必須是：在技術發明和促進科學技術進步等方面做出創造性突出貢獻的香港特區居民，或在香港特區從事科學研究、技術開發的其他人士。參選者的主要科學研究、技術開發成果必須在香港特區進行和完成。倘若參選者的項目是與香港特區以外的人士合作完成，該參選者必須為項目的主要完成人。外籍人士如長期在華從事科研工作（即在中國國內（包括香港）連續工作不少於五年，每年在華工作時間不少於六個月），並為中國科學技術發展做出突出貢獻，亦符合提名資格。

本欄目所列的完成人應對本項目的主要發明點做出貢獻。主要完成人排序應按貢獻大小順序排列。完成人數不超過 6 人。對於排名在前三位的完成人，應為核心發明專利的發明人。

**“Principal Person(s) who Completed the Project”** refers to candidate(s) for nomination by the HKSAR Government who must be either resident(s) of the HKSAR who has/have made outstanding innovative contributions in the areas of scientific discovery and technological development, and who has/have promoted the progress of science and technology; or person(s) who has/have engaged in scientific research and technology development in the HKSAR. The candidate’s major research and development work should be conducted and completed in the HKSAR. In case the candidate cooperates with researchers outside the HKSAR, the candidate should be the principal person who completed the project. Foreign nationals who engage in technological research in China on a long-term basis (i.e. working in China (including Hong Kong) for not less than 5 consecutive years with at least 6 months of working in China each year) and make outstanding contributions to the scientific and technological development of the country are also eligible for nomination.

In this column, names of the principal persons should be listed in descending order of their contributions to the core technological inventions of the project. The number of principal persons should not exceed 6 persons. The first 3 persons being listed should be the inventors of the core patented technology.

3. **《任務來源》**在相應的字母上劃“√”。

**“Source of Task”**: Put a “√” against the appropriate alphabet.

- A. 國家計劃：指正式列入國家計劃項目；

State Programmes: Refer to projects that are officially listed under State Programmes;

- B. 部委計劃：指國家計劃以外，國務院各部委下達的任務；

Programmes of Ministries or Commissions: Refer to tasks that are assigned by various ministries and

commissions of the State Council, excluding those which are listed under State Programmes;

- C. 省、市、自治區計劃：指國家計劃以外，由省、市、自治區或通過有關廳局下達的任務；  
Programmes of Provinces, Municipalities or Autonomous Regions: Refer to tasks that are assigned by provinces, municipalities, autonomous regions or assigned through relevant departments or bureaux, excluding those which are listed under State Programmes;
- D. 基金資助：指以基金形式資助的項目；國家自然科學基金或其他基金；  
Foundation Support: Refers to projects that are financed by foundations: National Natural Science Foundation or others;
- E. 企業：指由企業自行出資進行的研究開發項目；  
Enterprises: Refer to R&D projects that are initiated and funded by enterprises;
- F. 國際合作：指由外國單位或個人委托或共同研究、開發的項目；  
International Cooperation: Refers to projects that are appointed by foreign units or individuals, or projects that are jointly studied and developed with foreign units or individuals;
- G. 非職務：指非本單位任務，不利用本單位物質條件和時間所完成與本職工作無關的或者無正式工作單位的研究開發項目；  
Not within One's Own Job Responsibilities: Refers to those which are not the unit's own tasks. The research and development of such projects is accomplished without using the material conditions and working hours of the unit. They are projects that are not related to one's own job or projects that are not duly assigned to any unit;
- H. 自選：指本基層單位提出或批准的，佔用本職工作時間研究開發的項目；  
Self-Chosen: Refers to projects that are put forward or approved by the basic-level unit itself. Such projects are studied and developed during office hours;
- I. 其他：不能歸屬於上述各類的研究開發項目，如其他單位委托的項目等  
Others: Refer to the research and development of projects that does not belong to any of the above categories, like projects appointed by other units.
4. **《項目起止時間》** 起始時間指立項研究、開始研發日期，完成時間指項目整體技術首次應用日期。

**“Project Commencement and Completion Dates”**: Commencement Date means the date when the project is set up for research and when development of such project has started, whereas Completion Date means the date when the project's overall technological outcome was put into service.

5. **《已授權的發明專利數目》** 應填寫直接支持本項目技術發明內容成立的已授權發明專利數目。列入計數的發明專利應為本項目獨有，且未在已獲國家科學技術獎勵項目或本年度其他申請項目中使用。

**“No. of Patent(s) Granted”** should take into account the number of patent(s) that directly support the content of the technological inventions of the project. The patent(s) listed should be solely owned under the project and should not have been cited in other awarded projects in the State Science and Technology Awards or other projects under application for the Awards in the present year.

6. **《已授權的其他知識產權數目》** 應填寫直接支持本項目技術發明內容成立的除發明專利外的其他授權知識產權數目，例如計算機軟件著作權、集成電路布圖設計權、植物新品種權等。列入計數的知識產權應為本項目獨有，且未在已獲國家科學技術獎勵項目或本年度其他申請項目中使用。

**“No. of Other Intellectual Property Rights Granted”** should take into account the number of intellectual property rights (IPRs), other than the invention patents, that directly support the content of the technological inventions of the project, such as copyrights of computer software programme, IPRs on integrated circuit design diagram, and IPRs on new species of plants, etc. The IPRs listed should be solely owned under the project and should not have been cited in other awarded projects in the State Science and Technology Awards or other projects under application for the Awards in the present year.

## II. 項目簡介

### Brief Introduction of the Project

《項目簡介》是向國內外公開、宣傳推薦項目的基本材料，應包含項目主要技術內容、授權專利情況、技術經濟指標、應用及效益情況等。內容中文不超過 1 頁，英文不超過 0.5 頁。

“**Brief Introduction of the Project**”: Information of the project that could be released to the public and used for promotion. It should include the project’s major technological content, grant of patents, techno-economic indicators, application, benefits, etc. Content should not exceed 1 page in Chinese and half-page in English.

## III. 主要技術發明

### Major Technological Inventions

1. 《**主要技術發明**》是申請項目和申請書的核心內容，也是評價項目、處理爭議的主要依據。主要技術發明應圍繞首創性、先進性和技術價值，客觀、真實、準確地闡述項目的立項背景，技術內容中前人沒有的、具有創造性的關鍵、核心技術，對比當前國內外同類技術的主要參數，並列明主要知識產權和標準規範等。此部分不得涉及評價內容。技術發明點按重要程度排序。每項技術發明在闡述前應首先說明所屬的學科分類名稱和支持其成立的授權知識產權。對於核心技術未取得授權知識產權的項目，不能申請國家技術發明獎。內容中文不超過 5 頁，英文不超過 3 頁。

“**Major Technological Inventions**”: Being the core part of the project and the application, information set out in this column is the main reference for project assessment and controversy settlement. This section should focus on the originality, progressiveness, and technological value of the project. The applicant should provide objective, true and accurate elaborations on the background of the project, as well as those key and core technologies which possess inventiveness and have not yet been invented by predecessors. Comparison with the major technological parameters of similar technologies prevailing in China and abroad should also be made. Information on major intellectual property rights and standard specifications should be provided. However, this section should not consist of subjective comments. The technological inventions should be listed in the order of their importance. Please provide information on the academic category and the supporting licensed IPRs for each technological invention. A project is not eligible to apply for the State Technological Invention Award if the IPR of its core technological invention is not yet granted. Content should not exceed 5 pages in Chinese and 3 pages in English.

2. 《**技術局限性**》是申請項目現階段還存在的技術局限性及今後的主要研究方向。內容中文不超過1頁，英文不超過0.5頁。

“**Technological Limitations**”: Refer to the existing technological limitations of the project and the upcoming major direction of research. Content should not exceed 1 page in Chinese and half-page in English.

## IV. 客觀評價

### Third Party Assessment of the Project

圍繞首創性、先進性和技術價值，提供除項目完成單位、主要完成人和具有直接利益相關者之外的第三方對本項目發明的客觀評價。填寫的評價意見要有客觀依據，主要包括與國內外相關技術的比較、國家相關部門正式作出的技術檢測報告、驗收意見、鑒定結論、國內外同行在重要學術刊物（專著）和重要國際學術會議論文集等公開發表的學術性評價意見、國內外重要科技獎勵等，可在附件中提供證明材料。非公開資料（如私人信函等）不能作為評價依據。內容中文不超過 2 頁，英文不超過 1 頁。

Please provide objective assessment by a third party (i.e. other than the principal unit(s)/person(s) who completed the project and party with direct benefit) in respect of the originality, progressiveness, and technological value of the project. Such assessment should be supported by evidences, including essentially comparison with related technologies prevailing in China and abroad, technology testing reports, inspection and acceptance reports or certification conclusions formally issued by relevant Mainland authorities, academic review comments publicly made by local and overseas peers in major academic journals (publications) and proceedings of major international academic conferences, and important science and technology awards won in

China and abroad etc., with supporting documents provided in the appendices. Non-public information (such as private communication) could not be used as supporting documents of the assessment. Content should not exceed 2 pages in Chinese and 1 page in English.

## V. 應用情況和效果

### Application and Results

#### 1. 應用情況 Overview of Application

應就申請項目的技術應用的對象及規模情況進行概述，並在附件中提供主要客觀佐證材料的關鍵頁或材料目錄。內容不超過 2 頁，《主要應用單位情況表》中所列單位一般不超過 15 個。項目整體技術須已應用三年以上（2017 年 12 月 31 日或之前應用），並需提供相關證明。

Please briefly describe the target and scale of the application of the project in no more than 1 page and provide supporting evidences in the appendix to the application. The “Summary Table of Major Units Applying the Project” should, in general, contain no more than 15 organisations. Supporting documents are required to prove that the project and related technology have been applied for over 3 years (i.e. since 31 December 2017 or before).

#### 2. 應用效果 Results of Application

根據行業領域特點填寫應用效果。中文不超過 2 頁，英文不超過 1 頁。

Please provide details on the application results of the project according to the characteristics of the industry and technological aspect of the project in no more than 2 pages in Chinese and 1 page in English.

本節應說明申請項目在解決行業技術問題、推動科學技術進步、保護自然資源和生態環境、保障國家和社會安全、改善人民物質文化生活及健康水平、提高國民科學文化素質和培養人才等方面所起的作用。

This section should describe the effects brought by the project under application in resolving technical problems in the industry, promoting scientific and technological advancement, conserving natural resources or ecological environment, safeguarding national and social security, improving people’s tangible cultural life as well as living and health standards, raising the general knowledge in science, as well as nurturing talents, etc.

如有經濟效益，主要介紹完成單位和《主要應用單位情況表》中所列單位近三年應用本項目技術所取得的經濟效益情況。填寫經濟效益數據的，應注明計算方式，並在「其他附件」中提交支持數據成立的客觀佐證材料。

The applicant may provide details on the economic returns created by the project, if any. Only economic returns incurred in the recent 3 years to the Principal Unit(s) at which the Project was Completed and organisations applying the project (as listed in the “Summary Table of Major Units Applying the Project”) should be included. If figures are provided in this section, please specify the source of data and the basis of calculation and support them by relevant documents attached as appendices to the Application Form.

## VI. 本項目曾獲科技獎勵情況

### Information on Science and Technology Awards Given to this Project

《本項目曾獲科技獎勵情況》應填寫申請項目於國內外所獲得的科技獎勵情況。2000 年以前獲得的獎勵可以在申請書第 III 部分《主要技術發明》一欄中表述。

“Information on Science and Technology Awards Given to this Project” requires information about the local and/or international science and technology awards obtained. Awards obtained before 2000 can be listed under Part III “Major Technological Inventions” of the Application Form.

## VII. 主要知識產權和標準規範等目錄

### Index of Major Intellectual Property Rights (IPRs) and Standard Specifications

《主要知識產權和標準規範等目錄》指直接支持本項目主要技術發明成立且已批准或授權的知識產權（包括發明專利、實用新型專利、植物新品種權、計算機軟件著作權、集成電路布圖設計權、論文等）和標準規範等。請按與申請項目主要技術發明的密切程度排序，並在附件中提交列表前三項的有關授權證書和申請書等證明的副本。發明人均不是項目主要完成人的發明專利，不得列入本表。

“Index of Major Intellectual Property Rights (IPRs) and Standard Specifications” refers to those IPRs and standard specifications granted or approved which support the major technological inventions of the project. The categories of IPRs include: invention patents, utility model patents, IPRs on new species of plants, copyrights of computer software programme, IPRs on integrated circuit design diagram, and research papers, etc. IPRs and standard specifications should be listed in descending order of their relevance to the major technological inventions of the project under application. Copies of the supporting documents including authorised certificates and applications regarding the first 3 items in the list should be provided as appendices. **Invention patents of which the Principal Persons who Completed the Projects are not listed among the inventors shall not be included in the Index.**

在本部臚列知識產權作申請獎項之用時，應已取得申請書中未被列入為項目主要完成人的知識產權權利人及發明人之書面同意，有關知情證明材料均必須以附件形式夾附在申請書，項目第一完成人亦須簽署作實。

Written consent should have been obtained from the IPR owner(s) and inventor(s) who are not listed as “Principal Person(s) who Completed the Project” in this application for listing the IPR for the purpose of application for the State Technological Invention Award. Supporting materials on the knowledge of such consent should be attached to this application as appendices. The first Principal Person who completed the project should also sign as confirmation.

## VIII. 主要完成人情況

### Information on Principal Person Who Completed the Project

《主要完成人情況》是評價完成人是否具備獲獎條件的重要依據，應按申請書要求逐項填寫。

“Information on Principal Person Who Completed the Project”: This serves as an important basis to assess whether the person who completed the project is qualified to receive the award. Completion of every item in accordance with the requirements of the Application Form is required.

《對本項目主要技術發明的貢獻》應填寫該完成人對本項目做出的實質性貢獻，註明對應於申請書第 III 部分《主要技術發明》所列第幾項技術發明，並列出支持完成人貢獻的旁證材料的名稱及提交相應附件材料。該等旁證材料應是支持本項技術發明的材料之一，如授權發明專利、直接支持核心發明成立的論文（專著）等。與他人合作完成的技術發明，要明確闡述本人獨立於合作者的具體貢獻，以及支持本人貢獻成立的證明材料在附件中的編號。內容中文不超過 300 字，英文不超過 150 字。

**“Contributions to the Major Technological Inventions of the Project”**: please specify all the substantial contributions which the person who completed the project has made corresponding to the technological inventions listed in Part III “Major Technological Inventions” of the Application Form. Supporting documents that support the contribution of that person, such as IPRs granted, dissertations and publications supporting the core inventions etc., should be listed in terms of their titles and attached in the appendix accordingly as one of the materials that support the technological inventions of the project. For technological inventions created in collaboration with other persons, please specify the contributions made independently by the Principal Person Who Completed the Project and the serial number of the relevant evidence as attached in the appendix to the Application. Content should not exceed 300 words in Chinese and 150 words in English.

## IX. 完成人合作關係

### **Collaboration among the Persons who Completed the Project**

簡述完成人在項目中的合作經歷，並提供佐證材料。第一完成人須聲明有關內容真實無誤，並簽署作實，以及填寫申請書中的《完成人合作關係情況總匯表》。

Please briefly describe the collaboration among the Persons who Completed the Project and provide supporting materials. The First Principal Person who Completed the Project shall declare that such contents are true and accurate and sign the Description as confirmation. Please also complete the “Summary Table of Collaborations among the Persons who Completed the Project”.

## X. 附件

### **Appendices**

附件是申請項目的證明文件和輔助評審材料。具體要求按次序如下：

Appendices refer to the supporting documents and materials relevant to the assessment of the project under application. The following appendices in order of sequence are required:

1. 知識產權和標準規範等證明（包括申請書中未被列為項目主要完成人的知識產權權利人及發明人之書面同意）

Proof of Intellectual Property Rights and Standard Specifications (including the written consent from the IPR owner(s) and inventor(s) who are not listed as “Principal Person(s) who Completed the Project” in this application).

2. 應用滿三年的佐證材料

見申請書的附件。應用證明指本項目整體技術的應用單位提供的應用證明，且能證明本項整體技術已正式應用三年以上。應用單位需與申請書「應用情況和效果」中的應用單位一致。

Proof of application for over 3 years

Please see the Annex to the Application Form. Proof of application refers to the supporting documents provided by the unit applying the overall technology of the project, which could demonstrate that the technology has been formally applied for more than 3 years. The units providing supporting documents should tally with those listed in “Application and Results” of the Application Form.

3. 國家法律法規要求行業審批文件

Approving documents on the industries required by the State’s laws and regulations.

4. 在中國（包括香港）的聘用合同（只適用於外籍人士）

需提供能證明外籍人士在中國（包括香港）連續任職工作不少於五年，每年在中國（包括香港）從事科技研發工作時間不少於六個月的聘用合同。

Employment contracts in China (including Hong Kong) (applicable to foreign nationals only)

Please provide employment contracts demonstrating not less than 5 consecutive years of working experience in China (including Hong Kong) of the foreign nationals with at least 6 months of engaging in technological

research and development work in China (including Hong Kong) each year.

5. 其他證明 — 如：應用情況和效果佐證材料、支持項目發明點、完成人貢獻的其他相關證明（包括論文提交首頁、專著提交首頁及版權頁等）。

Other supporting documents — such as proof of application and results, information or materials which can support the major technological inventions of the project or the contribution by the principal persons who completed the project, e.g. dissertations (only the front page is required) and publications (only the front page and the page showing the copyrights are required).

## **XI. 其他 Others**

創新科技署及評審委員會的一切決定，對香港特區參與國家技術發明獎有關的一切事宜均具約束力。所有參選資格、規則、評審準則及獎項均以國家科學技術獎勵工作辦公室所制訂的要求以及最後公布為準。

All decisions made by ITC and the Judging Panel will be binding in all matters relating to HKSAR's participation in the State Technological Invention Award. All eligibility criteria, regulations, assessment criteria and awards are subject to the requirements prescribed by the National Office for Science and Technology Awards (NOSTA) and its final announcement.