

How to Apply for a Patent

A Guide for *FIRST LEGO League* Teams Submitting to the Global Innovation Award

(And any team wanting to learn about the patent process)

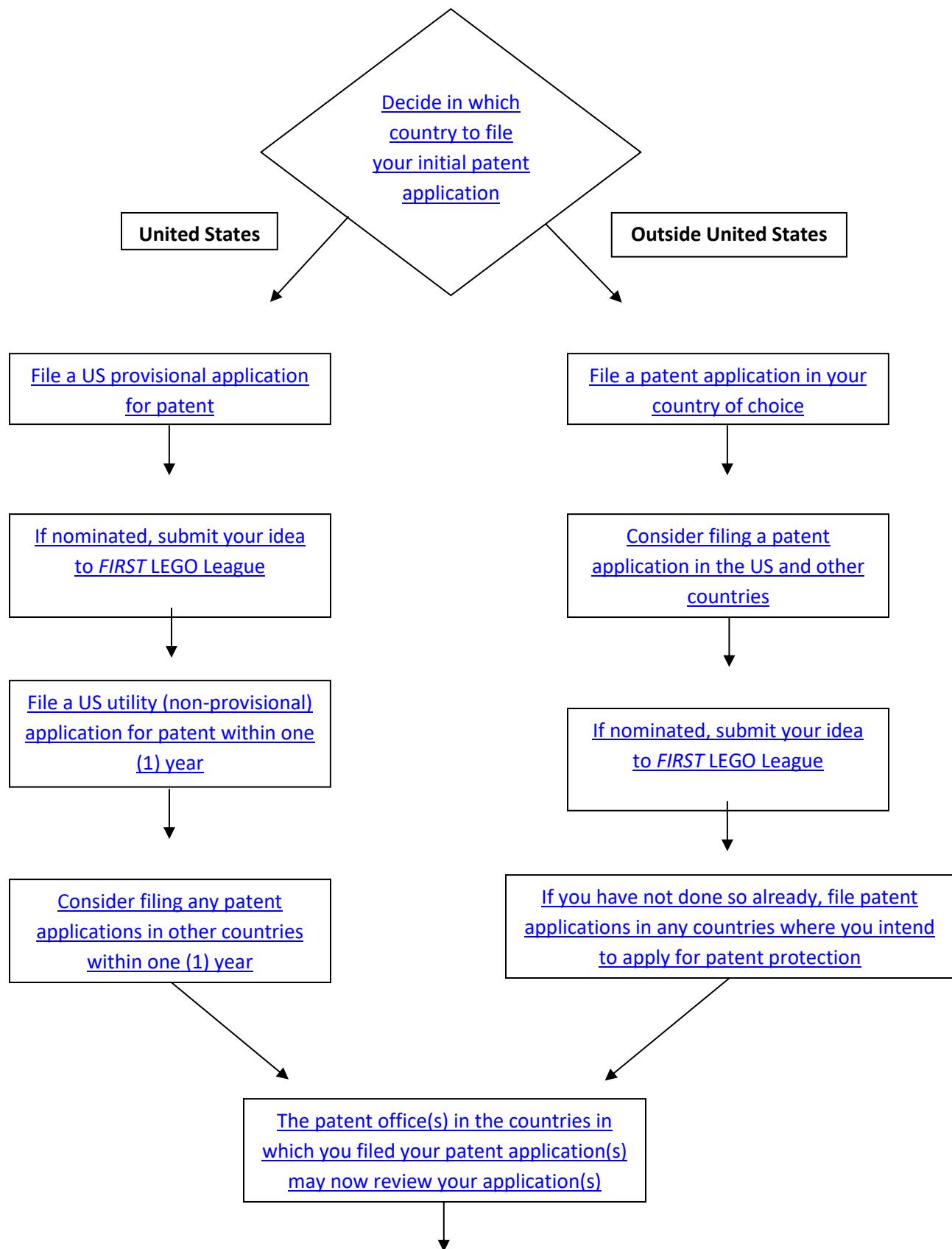
Anyone may apply for a patent in the United States and in many other countries, but you may have more success working with a professional [intellectual property](#) attorney or patent agent. If you choose to work with a patent professional, they will probably perform some of the steps outlined below. Make sure to check with them about which steps your team needs to complete and which steps the patent professional will finish for you.

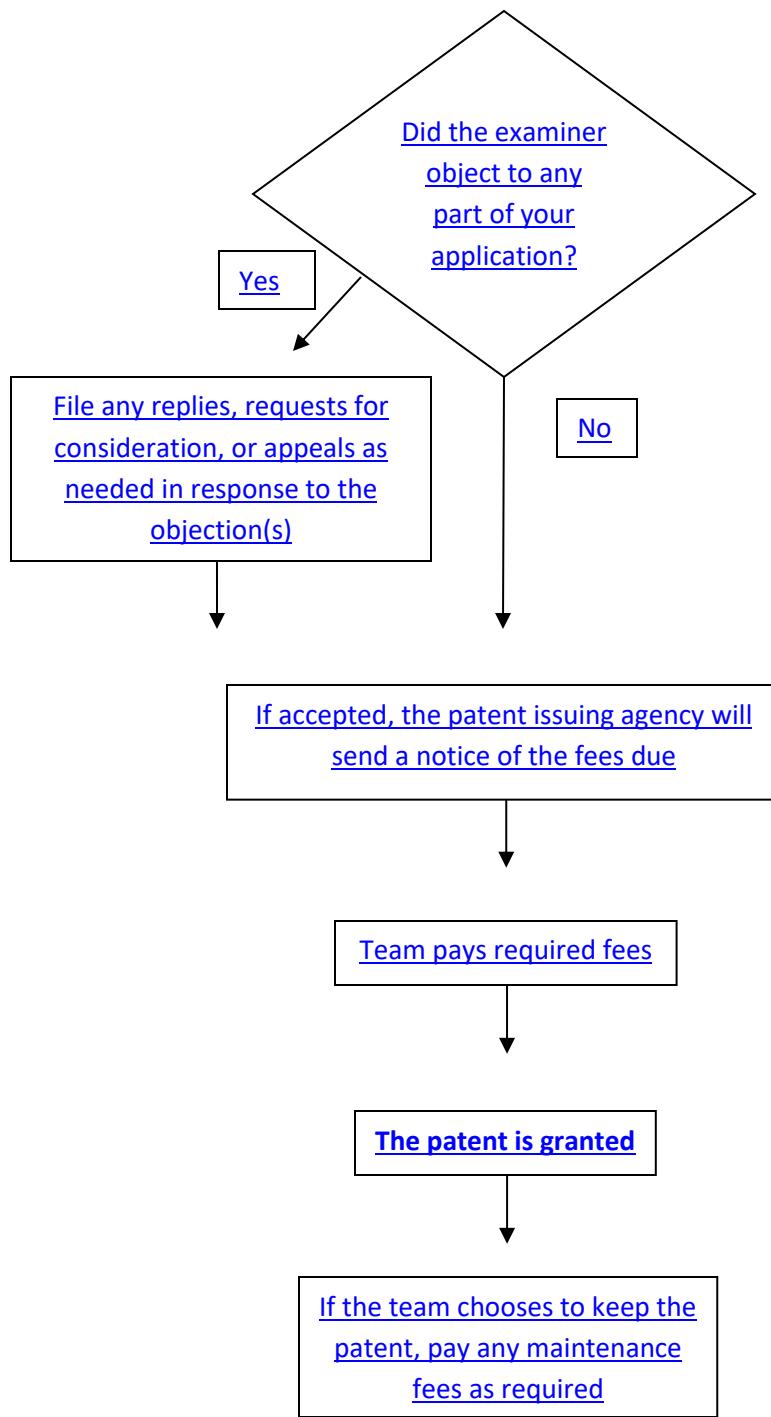
Each box below represents one step along the process of applying for patent protection. You can click on any box to locate more information. This information is intended *only as a guide*, and you should refer to specific information about the patent process in your country.

[Decide if your team is going to work with a patent professional or submit the initial patent application on your own](#)

[Create a description and drawings of your team's invention](#)

[Do a search to make sure your idea is original/novel enough to get a patent](#)





Detailed Explanation

Decide if your team is going to work with a patent professional or submit the initial patent application on your own



You may decide to consult a patent professional at any stage along the way, but it is a good idea to consider early whether your team wants to file an initial patent application, such as a provisional application for patent (provisional application) in the United States, on your own or seek professional guidance. If you file on your own, you are considered as filing *Pro Se*.

The patent offices in many countries keep lists of patent professionals. For example, the United States Patent and Trademark Office (USPTO) has a database of patent professionals authorized to file patent applications with the USPTO. See <https://www.uspto.gov/patents-getting-started/using-legal-services/pro-bono/patent-pro-bono-program> for the searchable list. You may work with any patent professional you choose, but it might be helpful if they are located nearby so that you can meet with them in person.

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Create a description and drawings of your team's invention



The USPTO and patent offices in many other countries provide information regarding preparing and filing for patent protection. For example, you may want to review "Provisional Application for Patent" (<http://www.uspto.gov/patents/resources/types/provapp.jsp>), "A Guide to Filing a Utility Patent Application" (http://www.uspto.gov/inventors/guide_file_utility_pat_app.pdf), or "A Guide to Filing a Design Patent Application" (<https://www.uspto.gov/patents-getting-started/patent-basics/types-patent-applications/design-patent-application-guide>). The USPTO runs an [Inventors Assistance Center](#) to help answer basic questions.

One of the first things you need in order to file your patent application in the United States and many other countries is a detailed description of your invention. What does it do? How does it work? What makes it different from the other solutions currently available? Also include detailed drawings or flow diagrams of your invention. If your team creates a poster, flyer or other materials to share your invention with others, you may want to include that information in your patent application also.

If you are working with an attorney, you should bring your descriptions, drawings, and documents to show him or her at your first meeting. This will help them understand your invention better. They may ask you more questions to understand all the details and make suggestions about how to improve your documents.

Do a search to make sure your idea is original/novel enough to get a patent



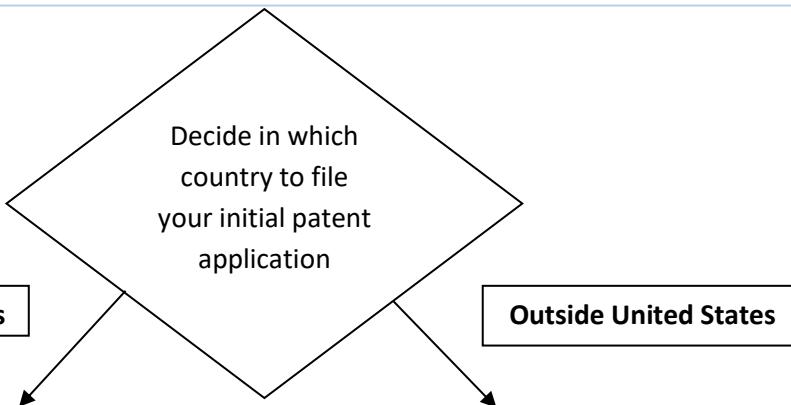
You will only be able to get a patent on your team's invention if it is new and different enough from all other prior inventions. It must also be non-obvious. If someone else already had the same idea and publicly presented or disclosed it, your application may be rejected. It is a very good idea to find out before you spend time and money filing for a patent.

You can check patent databases to see if anyone else has applied for a similar patent. Examples of patent databases include the USPTO (<https://www.uspto.gov/patents-application-process/search-patents>) or Espacenet from the European Patent Office (<http://www.epo.org/searching-for-patents.html>).

You can also check publications, such as scholarly journals and other articles at your local library or online and search the internet for products based on a similar idea.

If you find that someone has already had the same idea, you could try to improve the idea further, such as making the idea better or less expensive to produce and apply for a patent based on your improvement.

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Where you can file your initial patent application may depend on where your team members live or have citizenship.

If all of your team members who contributed to your team's invention live and/or are citizens of the United States, you can file a provisional application in the United States.

If some or all of the team members who contributed to your team's invention live and/or are citizens of countries outside of the United States, you should consult the patent office of each of those countries (or a patent professional) to determine where you should file for a patent first. Some countries require residents and/or citizens to first file for a patent in that country before filing in other countries, but some countries allow residents and/or citizens to file for a patent in any country.

If your country allows its residents and/or citizens to file for a patent application in any country, you may want to consider filing a US provisional application, because it is easier and less expensive compared to filing a patent application in some other countries.

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United States

File a US provisional application
for patent



You are not required to submit a provisional application for patent (provisional application) in order to apply for a patent in the United States. A provisional application for patent is basically a draft of your patent application which buys you time to complete your full (non-provisional) application.

We encourage all Global Innovation Regional Nominee teams to file a provisional application, especially if you are filing on your own, because this will protect your idea for twelve (12) months while you complete submission for the [FIRST LEGO League Global Innovation Award](#). It allows you to put “patent pending” on your materials about this invention so that other people know you are working on applying for a patent.

The cost of a provisional application is lower (around \$100-\$400), so your team could also use the extra time to raise money for the final utility patent application fees. For a complete list of application fees, visit the USPTO website at <http://www.uspto.gov/learning-and-resources/fees-and-payment/uspto-fee-schedule>

For a provisional application you will need to submit an explanation and diagrams of your invention to show that your team really invented it, but your provisional application will not be reviewed by a patent examiner yet. It will wait in the application system until you are ready to file your non-provisional application (your final draft) within one (1) year. The provisional application expires one (1) year after it is filed, so make sure you keep track of the dates if you plan to submit a full (non-provisional) patent application.

If you are filing your own provisional application, remember to review the USPTO’s “Provisional Application for Patent” (<http://www.uspto.gov/patents/resources/types/provapp.jsp>).

You may submit your provisional patent application on the USPTO’s website at <http://www.uspto.gov/patents/process/file/efs/index.jsp>. You may also submit by mail using the process outlined in “Provisional Application for Patent” found at the link above.

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If nominated, submit your idea to
FIRST LEGO League



The USPTO does not consider whether you have been nominated to submit an invention to *FIRST* LEGO League Global Innovation when they review your patent application. However, you should protect your team's idea before submitting it. If you become one of the 20 Semi-Finalist Global Innovation Award teams, your idea will be promoted and shared on the www.firstinspires.org website and via social media channels, creating a great platform for promoting your idea and connecting to potential resources. You may lose the ability to protect your idea in the future if you have not taken the steps above. Please note: Global Innovation Award judges *do* sign a non-disclosure agreement with *FIRST*.

Filing either a provisional or a non-provisional application for patent will allow your team to continue the US patent application process after you enter the competition. Other countries may have different rules. No matter where you plan to file your patent application, it is a best practice to protect your idea before details of it become public.

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File a US utility (non-provisional) application for patent within one (1) year



We encourage nominated teams to submit a provisional application for patent first (see above) because this will protect your idea for one (1) year while you complete your non-provisional application and compete for the [*FIRST* LEGO League Global Innovation Award](#).

A non-provisional application for patent is your final application. Your application will have a better chance of being approved if you have put together a very detailed explanation of what specific features make your idea different from all the other ones out there. It is also a good idea to have detailed drawings or diagrams.

Before you file your application, you need to have the \$500-\$1000 ready to pay the filing and other fees for a non-provisional utility application for patent. For a complete list of application fees, visit the USPTO website at <http://www.uspto.gov/learning-and-resources/fees-and-payment/uspto-fee-schedule>

Please note that the USPTO has a category called a "Micro Entity" with lower filing fees. Your team may qualify for this category, so make sure you read the information carefully.

Once you submit your application and pay the fee, your idea will go into the line to be reviewed by a patent examiner at the USPTO.

If you are filing your own application, remember to review the USPTO's "A Guide to Filing a Utility Patent Application": http://www.uspto.gov/inventors/guide_file_utility_pat_app.pdf.

You may submit your non-provisional patent application on the USPTO's website at <http://www.uspto.gov/patents/process/file/efs/index.jsp>. You may also submit by mail using the process outlined in "A Guide to filing a Utility Patent Application" found at the link above.

Consider filing any patent applications in other countries within one (1) year



If your team is interested in patenting your inventions in countries other than the United States, you should file any applications within one (1) year of filing your provisional application. If you publicly talked about your invention before filing your provisional application, you may need to file foreign applications even sooner. Presenting your invention to a group of people during the *FIRST LEGO League* season or at a tournament might count as public disclosure. (If you are unsure, it is better to file early rather than late.)

If all of your team members who contributed to the invention are residents and/or citizens of the United States (or of other countries that participate in the Patent Cooperation Treaty (PCT), you have two options:

- 1) Submit a patent application in each country where you want to apply for patent protection, OR
- 2) Submit an application under the PCT. The PCT is an international agreement by over 100 countries around the world. It allows inventors to begin the patent process in many countries at the same time. It also gives you up to thirty (30) months to complete your patent application in many countries.

You will need to choose the countries where you think you will apply for a patent when you submit your PCT application. Each country still controls whether they will accept your application, and there may be additional steps for each country where you wish to apply for a patent. Submitting a PCT application may save you time and money though, depending on where you wish to apply for a patent around the world.

Read the information carefully or work with a patent attorney to decide the best option for your team.

You can learn more about the PCT and international patent law on the website of the World Intellectual Property Organization: <http://www.wipo.int/pct/en>.

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Outside United States

File a patent application in your country of choice



Patent laws vary from country to country, so please consult your country's patent office or a patent professional familiar with the laws of your country to make sure that you meet the requirements to apply for a patent in your country.

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Consider filing a patent application in the US and other countries



We recommend that teams submit at least a provisional application for patent in the US before submitting their invention to *FIRST LEGO League* after being nominated regionally. The United States Patent and Trademark Office (USPTO) allows an inventor who has filed a patent application in certain countries to claim priority to that earlier application as long as the inventor files a patent in the United States within twelve (12) months. This benefit is only given for countries that give similar benefits to applications from the United States.

You may want to check with your country's patent office or a patent professional to determine if you can claim priority or if you should file a US patent application before submitting your idea to *FIRST LEGO League*.

You may want to research this question for any other countries where your team would like to pursue patent protection.

If your home country participates in the Patent Cooperation Treaty (PCT), you should also consider whether a PCT application would be a good move. The PCT is an international agreement by over 100 countries around the world. It allows inventors to begin the patent process in many countries at the same time. It also gives you up to thirty (30) months to complete your patent application in many countries.

You will need to choose the countries where you think you will apply for a patent when you submit your PCT application. Each country still controls whether they will accept your application, and there may be additional steps for each country where you wish to apply for a patent. Submitting a PCT application may save you time and money though, depending on where you wish to apply for a patent around the world.

You can learn more about the PCT and international patent law on the website of the World Intellectual Property Organization: <http://www.wipo.int/pct/en>.

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REGIONAL NOMINEES: Submit your idea to *FIRST* LEGO League



Global Innovation Award nominees should consider protecting their team's idea before submitting it online to *FIRST* LEGO League for further judging. Judges do sign a non-disclosure agreement. If you are chosen to be one of the 20 Semi-Finalist teams, your idea will be included on the www.firstinspires.org website and promoted via social media campaigns, becoming public. You may lose the ability to protect your idea in the future if you have not taken the steps above.

Filing either a provisional or a non-provisional application for patent will allow your team to continue the US patent application process after you enter the competition. Other countries may have different rules. No matter where you plan to file your patent application, it is always a good idea to protect your idea before making it public.

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If you have not done so already, file patent applications in any countries where you intend to apply for patent protection



If permitted, you may have up to twelve (12) months to file patent applications claiming priority to your initial application. If you have not done so already, you could consider filing a PCT application or individual applications in the United States and other countries.

See "[Consider filing a patent application in the US and other countries](#)" above for further details.

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The patent office(s) in the countries in which you filed your patent application(s) may now review your application(s)

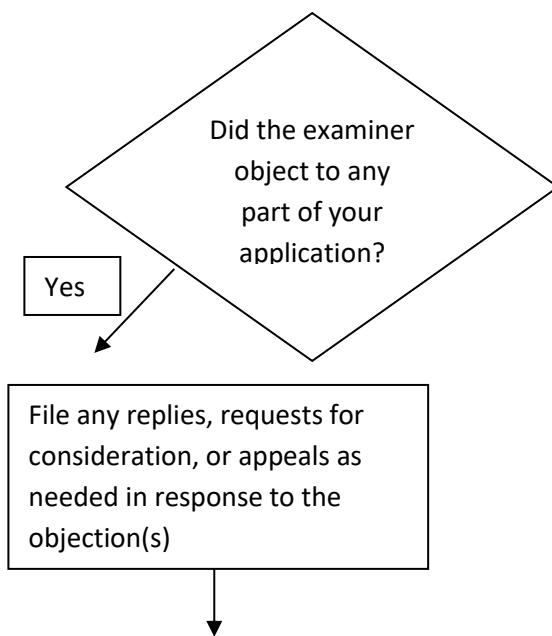


The patent application review process varies from country to country and may require additional steps. For example, you may need to request examination within a particular time period. Please carefully review the laws of your country.

In the United States, a non-provisional application is usually reviewed by an examiner in about two (2) years, but some applications may take longer. The examiner will check whether your invention is new, useful, and nonobvious. This means that your invention must have something that makes it different from all the other inventions out there; it must have some real use (and seem like it could work); and it must be something that is not obvious to an average professional in the field.

If you filed a PCT application, you have already chosen a list of countries where you wanted to complete a patent application. You must select the countries from that list where you now want to continue the process. This selection must usually be done within 30 months of when you submitted your original application. Please see <http://www.wipo.int/pct/en> for further details on PCT applications.

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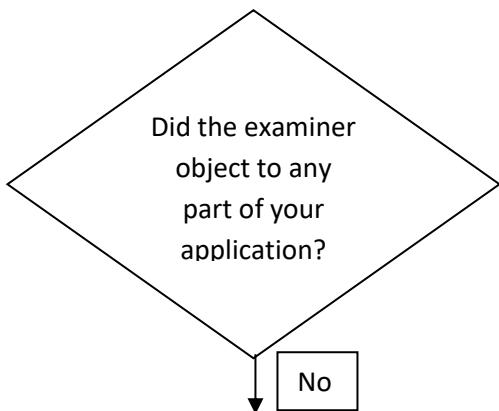


The patent examiner will check whether your invention is new, useful, and nonobvious. Many inventions pass these three tests, but you may need to give more details about how your invention meets the criteria if it is not clear to the patent examiner. The examiner will notify you if they need any further information or if they see any problems with your application. This is very common and a normal part of the process, so do not feel discouraged if your team's application is not approved on the first try.

If the patent examiner contacts you, do your best to provide all the information they request. Follow the procedure given by the examiner and provide all answers in writing.

If the patent examiner objects to any part of your application, this does not mean that you must give up on your application. It usually means that there is some problem with your application that needs to be fixed. Read any rejection carefully to see what additional steps you need to take, or talk to a patent professional. There are different kinds of rejections and things you can do next. Ultimately, if your application becomes abandoned because you decided to stop working on it you can always move on your next idea!

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If the patent examiner decides that your invention is new, useful, and nonobvious without asking for any further information, then your application will be approved. This does not happen very often, so you have a very special invention if your application goes through on the first try.

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If accepted, the patent issuing agency will send a notice of the fees due.



Team pays required fees



If your application is approved, there may be additional fees to issue the patent. In the United States, you will receive a letter telling you how much is due. The fees will range from about \$750 to \$1,500 to officially issue your US patent.

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The patent is granted



Once your patent is issued, you officially own the rights to your invention in the country where your patent is issued for a limited amount of time. During the time when your patent is valid, no one else may make or sell your invention without your permission. Your protection only covers what you described about your invention in your patent, so keep that in mind when you talk with others about your patent. *FIRST* would like to celebrate with you! Please e-mail fllinnovationaward@firstinspires.org with the happy news so we may give your team a shout out.

Your team may choose to keep the patent and try to produce the invention yourselves; license the rights to a company so that they can produce the invention and send you royalties; sell the patent to raise money for your team or school; or give the patent as a gift to a university or charity. There are many options.

Keep in mind that you may need additional permits or help to manufacture your invention yourselves. The patent only prevents other people from using your idea without your permission.

Carefully consider what you want to do with your patent. We highly recommend that you seek legal advice for your team before signing any contracts to manufacture, sell or give away your patent rights. You want to make sure your invention is used in the way your team planned.

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If the team chooses to keep the patent, pay any maintenance fees as required

If your team chooses to keep the patent, you may need to pay maintenance fees at specific times to keep the patent. For example, you can find the most current US patent fee listing on the USPTO website at <http://www.uspto.gov/patents-maintaining-patent/maintain-your-patent>. Currently, maintenance fees must be paid in the US at 3.5 years, 7.5 years and 11.5 years after your patent is issued. This varies by country, so check the fees in each country where you have a patent.

Your invention will be protected for a specific number of years if you continue to pay any maintenance fees required. In the United States, you may also choose to stop paying the maintenance fees, which means that the patent will expire on the next anniversary of the day you got the patent. For example, if you choose not to pay the 3.5 year maintenance fee, your patent will expire 4 years after you received it. Then anyone may use or produce your invention.

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