

PATENTS 101

What is a patent?

- A property right granted by the government that, for a limited time, permits the owner to **stop others** from **making, using, selling, offering for sale, or importing** what the patent **claims**.
- It does not necessarily permit you to do any or all of those things yourself.

Key Parts of the Patent

- **Claims**: the only thing that the patent protects
- **Drawings/specification**: the heart of the patent, gives meaning to what's claimed
- **Background** and **abstract**: have only very limited legal importance

Requirements

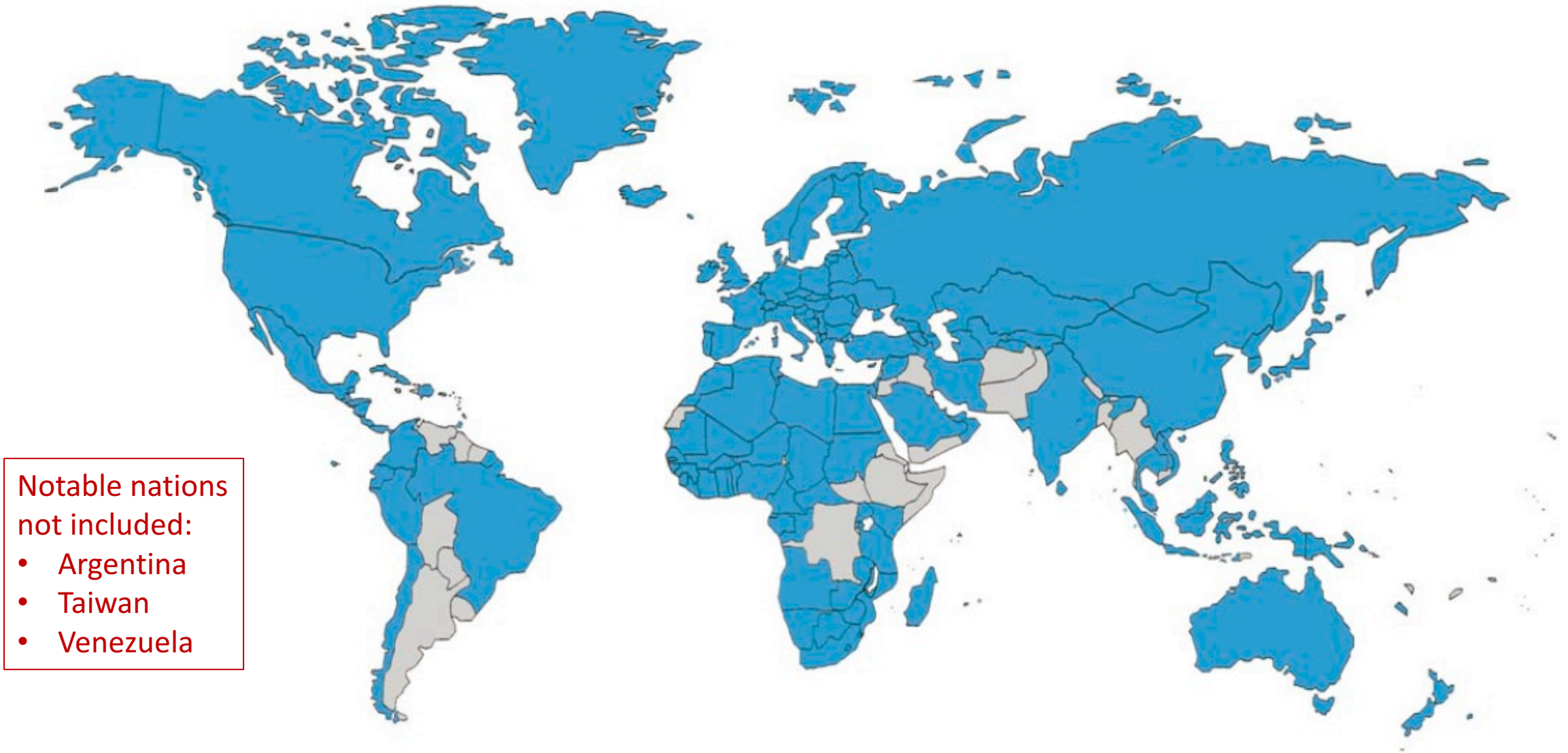
A patent will only be issued by a patent authority if the claimed invention is:

- novel
- non-obvious (called “inventive step” in some countries)
- has utility
- is adequately described

Types of Patent Applications

PROVISIONAL	In US only; a placeholder application that secures a filing date, but which is not examined. Has a limited 1 year term.
REGULAR (non-provisional)	An application that is examined and can potentially mature into a patent.
PCT (Patent Cooperation Treaty/ Paris Convention)	A single application that is recognized by all countries that are members of WIPO; after a preliminary examination, applicant can choose which countries to nationalize in.
NATIONAL PHASE FILING	A patent application filed in a given PCT member country that stems from a PCT filing.
DIRECT FOREIGN FILING	A patent application filed directly in a foreign country without going through a treaty application first.

PCT CONTRACTING STATES (July 2015)



Notable nations
not included:

- Argentina
- Taiwan
- Venezuela

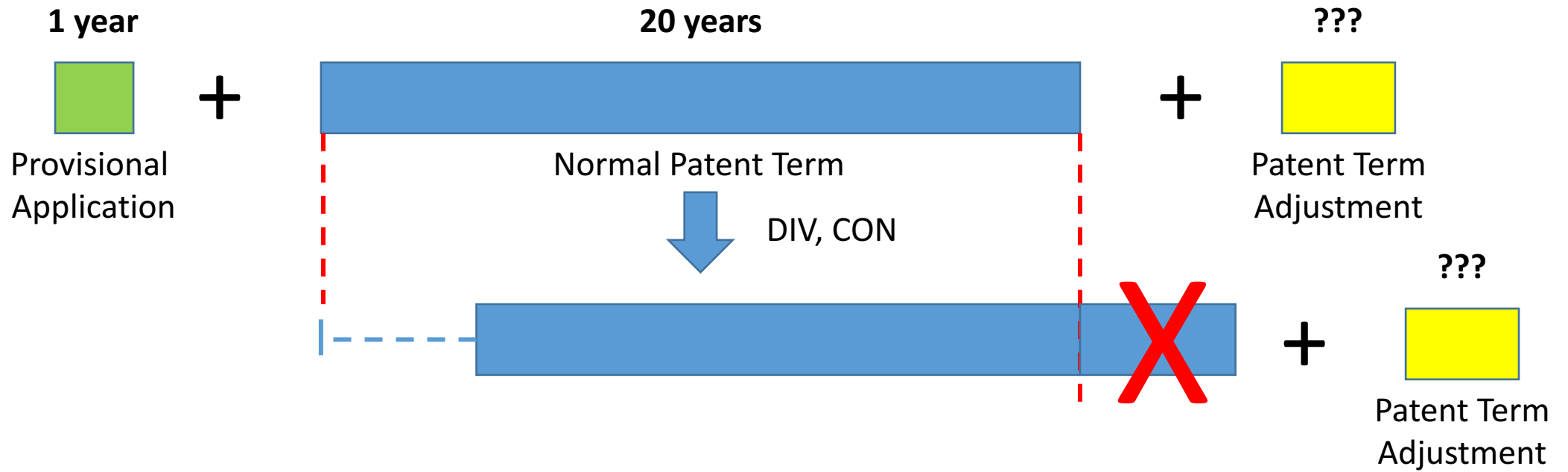
Other Int'l Patent Pacts

Eurasian Patent Convention (EAPO)	Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine
European Patent Convention (EPC) = "EP Patent"	AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR
Gulf Cooperation Council (GCC)	Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates

Patent Term

- Generally 20 years from the first regular filing in the family
- Lots of caveats and complexities:
 - Patents filed <1995 get 17 years from grant
 - (+) Delays at the USPTO may in some cases result in a Patent Term Adjustment
 - (-) Patent term can be artificially shortened if there's a terminal disclaimer
 - (+) Certain regulatory delays can potentially result in patent term extension
 - Patents need to be maintained: if fees aren't paid, the patent expires

You can't be sure when a patent will expire just by looking at its front page!



- The provisional application year does not count against your 20 yr patent term
- However, provisional applications are *secret* and have no rights other than securing a filing date for the invention.
- Patent Term Adjustment is awarded only when the USPTO has delayed your application; any delay you cause yourself comes off the top.

Process

After the application is filed with the patent office:

- Undergoes a formalities review
- Is assigned to an examiner:
 - Performs a publications search to identify any “prior art”
 - Examines your claims, issues rejection or allowance with justification
- You get a fixed time to respond in writing
 - Can poke holes in the Examiner’s arguments
 - Can amend your claims to dance around whatever is cited against you
 - In some cases, can appeal to the Board of Appeals (or equivalent)
- Go back and forth with the Examiner
- If claims issue, you get a patent upon payment of appropriate fees

Fees to Obtain and Keep a Patent

Sources of Fees	US Prov.* (\$)	US Regular* (\$)	PCT (\$)	EP (€)
Filing fees	180 + size fee	70+ claims fee + size fee	240 + claims fee + size fee	120 + 580 designation fee + claims fees
Publication fees	n/a	130	Part of “	75
Search fees	n/a	300	1040/invention	1285
Examination fees	n/a	360	300/invention	1620
Grant fees	n/a	480	n/a	915 + page fee (15/page >35)
Maintenance fees/annuities	n/a	4 yr: 800; 8 yr: 1800; 12 yr: 3700	n/a	Pending: 485-1560/yr Granted: varies per country
Translations	n/a	n/a	n/a	Claims into DE, FR, other – varies Whole doc: ES, PT, PL, ET, BG, AT, SI, BG, IT, HU,CZ, GR, TR et al.
Attorneys fees	low	varies	low	high

*small entity

Inventorship

- Invention is a combination of both **conception** and **reduction to practice**.
 - Need to inquire what everyone involved in the project contributed to it
- Inventorship is a legal determination
 - Tied to what is claimed, not the overall content of the application
 - Serious repercussions if incorrect
- Inventorship Authorship!
 - There is no significance whatsoever to the order of inventors
 - The company owns all patents, not the inventors

Protecting the Company's IP

- Repurposing known compounds for veterinary use faces IP challenges
- New developments are a more fruitful area for potential patenting:
 - Formulation
 - Overcoming technical problems
 - Any new science
 - Any differences observed from those on the human side

→ Please work with Legal at the time the program is formed to put together an overall patenting strategy for the program

→ Please keep Legal in the loop as programs develop – ongoing dialog

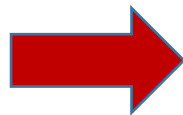
Diligence: Avoiding Other Patents

The act of searching through the patent literature to identify any patents that may be problematic for what we want to do.

- Often called a “Freedom-to-Operate” analysis.

What’s involved?

- Looking at orange book/purple book/green book listings for the compound
- Searching the patent literature broadly enough to catch anything relevant
- Studying the relevant patents found
 - consider timelines
 - consider any differences
- Compiling curated list
- Analysis



Providing specific guidance for the team