Procedure for Patenting

There will no longer be a distinction between patents and copyrights (the right to copy is an objective right). However, the procedure for patenting content is different than that for patenting products. Product patents are instantiations of content patents.

Patents are associated with persons and a percentage of ownership. If multiple persons are specified, the patent is in effect until the last person dies, or 25 years, whichever takes longer. Distribution of royalties goes to each owner in proportion to their ownership. These persons could have a private contract with a corporation or other business to move royalty funds to a business account, but a non-person cannot receive royalties directly.

Patenting is a free service of the Federation, funded by ground rent. All intellectual property (IP) is patented through patent specialists at the Federation Library (similar to the current functionality at the U.S. Library of Congress for copyrights). Applicants must sacrifice the universal copay each month the application is actively being worked on.

It should be noted that patent procedures and algebras are not specified in a charter or business plan. The Federation constitution delegates the drafting of policies to the Federation Library, to be ratified by a supermajority of the Federation Council. The guidelines below are early proposals up for debate.

The simplest is a content patent for an artistic work. Content is an original work that optionally contains attributed patented content or ideas. There is no limit to the amount of attributed content. A work can be .01% original and 99.99% attributed patented content.

Artistic content can be text, audio, video, photo, graphic, or other media. It can be fiction or nonfiction. It is **not** software, blueprints, designs, instructions, sheet music, formulas, or ideas.

To patent artistic content, the applicant must indicate the percentage of the work attributed to other owners. Even if the content has been paid in full for purchase into the commons, it still must be attributed and given a percentage.

All attributed content must be referenced by page or frame in the application. All creators of IP are notified when a new patent incorporates their work. Libel and out-of-context quotes are a civil matter that has no bearing on the patent process.

Newspapers, magazines, and other information sources have someone on board who is certified to patent artistic content and register that content online with the Federation Library. This allows for quick protection of individual articles and even live reports. Where applicable, legacy copyright law applies in determining ownership of artistic content.

Non-artistic content is categorized and patented within a classification tree designed for the category. The format of entries on a classification tree is called a stubby tree and is written in patent algebra. Weakly enforced length limits increase modularization and reuse in the knowledge base.

For instance, objects A, B, and C are each patented along the classification tree. The interactions between objects A and B, B and C, and C and A are patented in the classification tree, and the high-level design (stubby tree) references these six patents (stubby trees) for the objects and their interactions and is itself patented in the classification tree.

The patent algebra frames the growing set of variations on the patented theme. This applies to software applications but does not apply to code (or other notations) written in a language that subsumes the patent algebra. A patent algebra based on object-oriented notation that allows inheritance and method override would be superior to the one used below.

Product Patenting and Stubby Trees

Content pays no royalties until it is incorporated into a product. Product production is the instantiation of stubby tree content. For instance, the classification trees for blueprints, software, mechanical designs, chemical formulas, and other engineering notations terminate in stubby trees.

A stubby tree in the patent algebra is a set. A set is an unordered group of sets, sequences, alternatives, and stubby trees. A sequence is an ordered group of sets, sequences, alternatives, and stubby trees. An alternative is a choice of sets,

sequences, alternatives, and stubby trees. A stubby tree is an entry in a classification tree. It does not need to be in the classification tree of the parent stubby tree.

Aesthetic alternatives with no utility are not patentable and are excluded from the stubby tree. The null set is a valid alternative, although excessive use is a red flag to library patent experts and algorithms of poor stubby tree design.

When a stubby tree is instantiated, a single choice replaces all alternatives, and product codes replace all stubby tree children. An instantiated stubby tree is given a new product code, even if others exist for an identical instance.

When designing a product, there might not be a suitable stubby tree to instantiate. A product designer will prefer to develop their own stubby tree. If successful, this is a 50% draw on royalties for the product's distribution, regardless of manufacturer.

Artificial intelligence (AI) algorithms will hunt for other stubby trees with similar semantics that can be modified by adding alternatives. The final decision lies with a human patent expert at the Federation Library, which could involve splitting an existing stubby tree into two stubby trees and altering the IP ownership of existing patents. This is suggested by AI algorithms that examine stubby trees as they become busier with excess alternatives and split them into multiple stubby trees based on common paths of instantiation (with patent expert assent).

Once the product's stubby tree is determined, it must be instantiated with actual product codes for each part (components, modules, objects, chemicals, apps, materials, etc.). Existing parts on the market might be inadequate because **a)** they fail to meet the specification, or **b)** they can be produced more cheaply in-house. In either case, the part must be produced in-house, but the path to maximize royalties differs.

In the first case, one or more alternatives are added to the child stubby tree. The part associated with this new instantiation of the child stubby tree is patented. If the product designer could get away with a brand-new stubby tree for the child part, an alternative would be added to the main stubby tree, and the designer would receive 50% of the royalties along that branch for the distribution of that part.

In the second case, where the product can be produced more cheaply in-house, the process can be a trade secret or patented. Patenting processes generate royalties for oneself and additional royalties if others adopt the approach.

Trade secrets risk being developed elsewhere and patented, cutting off royalties (beyond 5%). Processes have their classification tree, but patenting is no different than patenting other non-artistic content.

Not all stubby trees have equal funding. Stubby trees in different parts of a classification tree and stubby trees in other classification trees are associated with different voluntary standards groups or a different allocation of currency funds within a voluntary standard group. But this is orthogonal to the percentage of IP ownership in a product.

Here are the proposed ownership rules for any stubby tree:

1. The percentage of ownership for obtaining a product (process) code is 5%.
2. Of the 95% remaining, the percentage of ownership for patenting the stubby tree is 50%.
3. The 47.5% remaining product ownership is divided equally between each component (child product codes). Each part has 4.75% ownership of the product if there are ten components.
4. The process is applied recursively to each child product. The percentage of ownership is independent of the “importance” of the component, whether there are no extant patents, or whether the component is manufactured internally or purchased.
5. Computed percentages are ignored for purchased components. The Elsie Toolkit has already accounted for the distribution of these components. Manufactured parts have weighted ownership by their computed share. Manufactured components, in isolation, give the manufacturer at least 5% IP ownership from the unique product code.

Regardless of original work, the right to use attributed sources and patent products, processes, and designs will enhance research, increase profits, and add to the world’s knowledge base. Creators will be better compensated than ever before. We can only imagine the increase in efficient productivity this will bring.