Licensing Terms / Royalty Rates

Please note: We do not provide legal advice and are not lawyers or certified licensing professionals. Although we seek to make sure our information is accurate and useful, we recommend you consult a lawyer if you want legal advice or a CLP for specific licensing information.

1. Licensing Terminology

The glossary below represents terms that may occur in negotiating a license.

Exclusivity determines the degree to which an agreement between the Licensor and Licensee allow for other agreements between Licensor and other companies.

> **Exclusive:** Under the terms of the agreement, Licensor would grant rights only to the Licensee. Licensor could not enter into a similar agreement with another company under similar terms.
>
> **Non-Exclusive:** Under the terms of the agreement, Licensor would grant rights to the Licensee. In this case, Licensor could enter into a similar agreement with another company under similar terms.

Exclusivity can be granted with qualifications, termed "Field of Use." Examples include geography, application, and customer type, among others.

> **Geography:** Licensor could grant exclusivity in a limited geography, for example the US.
> **Application:** As an example, Licensor could restrict the license to tactical radios but exclude SDRs used for satellite applications. They could even restrict the license to a particular device, such as Multifunctional Information Distribution System Joint Tactical Radio Systems (MIDS JTRS) terminals.
> **Customer Type:** Licensor could restrict the license to the US military or even the US Navy.

The status of the **intellectual property** (IP) can be a factor. For software, copyright law can govern. A registered copyright should garner greater royalties than software where the

copyright is not asserted. Algorithms can be patented. The value increases as the patent process progresses. A provisional patent is better than no patent. A pending patent is better than a provisional patent. An issued patent is better than a pending patent.

The means by which Licensor realizes financial benefit could have various terms.

Upfront Fees: A Licensee might pay Licensor upfront license fees for the right to use the software.
Royalty: Licensor might receive a royalty each time a unit is sold with their technology included. Royalties could be accrued on a per unit basis or royalties could be a set payment for a period (monthly, quarterly, annually).
Upgrades: Licensor could receive payment if they add new functionality to the software and deliver that functionality to the licensee.
Updates: Licensor could be paid to maintain the software, fixing outages or "bugs" as they are discovered.
Porting / Recertification / Revalidation: Licensor could receive payment if the software must be modified / recompiled / tested on a new version of the hardware.
Non-Recurring Engineering (NRE) Costs: Licensor could receive payment for NRE such as porting / validating the software to a new FPGA.

Some of these sources of revenue could offset royalties. For example, Licensor might receive **pre-paid royalties** to cover NRE costs. It is to the advantage of Licensor to negotiate **guaranteed minimum royalties**. This prevents a licensee from gaining rights for the sole purpose of keeping the technology out of the market ("shelfware").

Where the agreement pertains to royalties, Licensor might include a clause allowing them to **audit** sales volumes to verify royalties are being paid properly.

These next terms may arise, but are not necessarily as common in licensing arrangements.

Royalty stacking refers to the situation where a licensee must pay royalties to multiple parties in order to commercialize a product. As an example, multiple technologies comprise a mobile telephone or personal computer. The manufacturer prefers to negotiate low royalties so that as the royalties "stack,' the manufacturer still maintains a profit. A Licensor may negotiate a **royalty floor**, a percentage their royalty cannot fall below, to limit the impact of royalty staking.

Another protection could be to include **clawback provisions**. The agreement should contain a commercialization plan from the Licensee that includes revenue and / or royalty projections. Failure to meet these projections should trigger a conversation that could result in changes to the agreement. For example, if the Licensee has an exclusive arrangement but fails to meet the performance projections, exclusivity could be renegotiated or revoked. An extreme remedy would be to terminate the agreement.

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Another term that might arise is a **right of first refusal**. As an example, Licensor might grant a Licensee exclusive rights with the US Navy but withhold rights for the US Army. The licensee might demand right of first refusal if Licensor then decides to seek a Licensee to address the needs of the US Army.

2. Royalty Rates

There tends to be a royalty rate for certain industries or types of technologies. The table below summaries some rates for various application areas.

Market	Royalty Rate
Telecom / Communications	5.80%
Internet	8.20%
Electronics	5.10%
Computers	4.60%
Aerospace	4.00%

Other factors include exclusivity, support from the Licensor to the Licensee, maturity of the technology, IP protection, and market potential, among others.[1]

There are databases, like Royalty Range (https://www.royaltyrange.com), for tracking royalty rates. Also, the Licensing Executives Society (USA and Canada), Inc. maintains data on licensing, which can be accessed for a membership fee of $395 annually.[2]

One suggested method, the 25% rule, is to base the royalty at approximately one-quarter to one-third of the Licensee's anticipated pre-tax profits derived from the technology.

> *"Thus, in industries (such as software) where profit margins have historically been high, royalty rates are comparatively high. For example, if the parties anticipate that the licensee will have profit margins of 80%, the royalty paid to the licensor should be in the range of 20-30% of net revenues (before taxes). In contrast, in fields where profit margins are low (such as the food industry), royalties will be low: For example, if a licensee expects to generate additional profits of 4% by deploying some invention (say,*

1 Zipkin, Nina. "Your One-Stop Guide to Royalty Rates." July 22, 2014. Entrepreneur website: https://www.entrepreneur.com/article/235851 (accessed October 22, 2020).
2 "Membership Categories." Licensing Executives Society website: https://www.lesusacanada.org/membership-categories-2/ (accessed October 22, 2020).

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a novel food preservation technology), the royalty should be within the range of 1-1.5% of net revenues earned from deploying that technology."[3]

Another metric is the 5% rule.

> *"In terms of determining royalties, it so happens that in many industries — from medical devices to electronics and food — negotiations frequently yield a royalty of 5-6% of net sales. For example, a recent study concluded that the "median royalty rate across all industries was 4.5 percent." (This ranged from a low of 2.8% in the Food industries to a high of 8% in Media and Entertainment.) Therefore, when in doubt one can often assume that a royalty in this range will be reasonable."*[4]

Some discussion of patent licensing can be found at https://www.upcounsel.com/patent-licensing-royalty-rates.

An in-depth discussion from Deloitte, shows royalty rates on software at 10%.[5] A similar study by KPMG shows internet / software slightly in excess of 12%.[6]

3. Licensing Scenarios

Any licensee should produce a commercialization plan that projects units sold, revenue, and royalties for 3 – 5 years into the future. This is the basis for negotiating any licensing arrangement.

Licensor should receive a licensing fee upon execution of the license. This fee covers non-recurring engineering (NRE) costs to productize the software on the target platform, plus some profit. There should also be a royalty payment for on-going sales of the SDR with Licensor's technology embedded.

- Unless there are many royalty-bearing licensed technologies that comprise the SDR product, a safe starting point for a royalty would be 5%. This is a cited norm associated with electronics.

[3] Zaharoff, Howard G. "Setting Values and Royalty Rates for Medical and Life Sciences Businesses." June 18, 2012. Morse, Barnes-Brown & Pendleton, PC website: https://www.morse.law/news/setting-values-and-royalty-rates (accessed October 22, 2020).
[4] Ibid.
[5] Heberden, Tim. Chapter 4: Determination of Royalty Rates." Deloitte website: https://www2.deloitte.com/content/dam/Deloitte/au/Documents/finance/deloitte-au-fas-royal-rate-determination-290719.pdf (accessed October 22, 2020).
[6] "Profitability and royalty rates across industries: Some preliminary evidence." 2012. KPMG website: https://assets.kpmg/content/dam/kpmg/pdf/2015/09/gvi-profitability.pdf (accessed October 22, 2020).

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- Software (but not necessarily embedded software) can garner a higher royalty, more in the range of 10% – 15%. A royalty in this range would be more aggressive (and more profitable).

Once a royalty rate is decided, Licensor needs to decide whether they want recurring revenue from royalties or a lump sum.

- A lump sum would typically use a discounted cash flow for royalties over a period of time, typically 3 – 5 years. This is simple to administer. It protects Licensor from under-performance by the licensee. It does eliminate any upside resulting from over-performance by the Licensee.
- Royalties that produce a recurring revenue stream are based on sales for a period. Annual royalties are simplest. Licensor should include a clause that permits them to review sales data to verify any royalty.

If Licensor is receiving annual royalties, there should be a minimum royalty due. This protects Licensor from under-performance against goals / quotas by the Licensee. It incentivizes them to actively sell the product.

The last issue to be negotiated is exclusivity. If Licensor has prospects for other markets or applications, they should include Field of Use terms. They might choose to only license the initial incarnation of the technology for the specific US Navy equipment, reserving the right to pursue other licensing opportunities with vendors of other military, tactical software-defined radios.

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