

Policies and Procedures for the Distribution of Licensing Income

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Each technology transfer office has its own policies and procedures for distributing licensing or royalty income to inventors and their departments. Taking care of this administrative task in a fair, consistent, and timely manner may not generate accolades from recipients of the income. However, failure to distribute licensing income properly will likely generate unfavorable responses from the stakeholders of the income. This chapter provides a framework to help technology transfer professionals smoothly carry out this important task.

Legislative Rational for Distributing Licensing Income

Congress passed two acts in 1980 that created much of the potential for the transfer of federally funded inventions out of universities, nonprofit research institutions, and federally owned laboratories. The Stevenson-Wydler Act (P.L. 96-480) set the foundation for commercialization of innovations within federal agencies and their laboratories. The Bayh-Dole Act (P.L. 96-517) followed, which allows universities and research institutions to take ownership of federally funded inventions for the purpose of transferring them to industry.

These acts permit the receipt of licensing income from industry in exchange for the rights to use the intellectual property. However, the acts vary in their provisions concerning how that licensing income should be used or distributed. The Stevenson-Wydler Act specifies that the federal agency must share at least 15 percent of the licensing income received with the inventors for their own personal use. Additionally, each inventor's share of licensing income is capped at \$150,000 per year. The Bayh-Dole Act also requires that universities must share licensing income with inventors, but does not specify any minimum or maximum percentage or specific amount to be shared.

Practical Rationale for Distributing Licensing Income

Most company employees do not have the opportunity to receive a significant share of income resulting from their inventions. In high technology and biotechnology companies, employee innovation is often critical to the success of the companies, and employees are expected to innovate as part of their work. Although innovative employees may receive bonuses or awards, no additional compensation may be expected even if their inventions are blockbusters for their companies.

This particular employment understanding does not work well in academia. Universities are nonprofit organizations and are not in the business of developing new products. Moreover, most university employees are not evaluated for promotion or tenure based on their number of inventions. Instead, the focus is on publications, research support, and teaching. Therefore, the potential for receiving a share of licensing income is an additional inducement beyond traditional academic activities to encourage university employees and their departments to participate in the technology transfer process.

Intellectual Property Policies

Most organizations have written policies detailing many of the obligations expected of employees. These policies may be bundled into a single employee handbook or may be kept as separate documents. It is important that employees be provided with a copy of the policies and asked to review them as part of their employment. Intellectual property policies govern, among other things, the ownership of intellectual property that is generated by university employees as well as how licensing income will be shared with the employees and departments. An institution may have a single intellectual property policy or may have multiple policies that deal with various aspects of technology transfer.

For example, Virginia Commonwealth University (VCU) uses a single policy that governs most of the technology transfer office's activities.¹ On the other hand, University of California has separate policies that deal with commercialization of patents and copyrights and acceptance of equity from licensees.² In any case, the university's intellectual property policy should clearly describe how licensing income is to be distributed. The remainder of this chapter will discuss many of the details that should be included in the policy.

For more on intellectual property policies, including samples, see volumes 2 and 3 of the AUTM Technology Transfer Practice Manual, 3rd Edition.

Licensing Income Defined

Before a technology transfer office can distribute licensing income/royalties that it receives from a licensee, it must define what will be considered licensing income. For the purposes of this chapter and for many institutions, the terms *licensing income* and *royalties* are used interchangeably. At VCU, gross licensing income is defined as the following:

Anything of value received by the University, including cash payments as well as the market value of any property or services received, in consideration for a transfer of rights and/or title to Intellectual Property in which the University claims an interest. Funds received by the University to support research that results in the development of Intellectual Property is not royalty income.

Note that licensing income is consideration that is received in exchange for granting rights to the licensed technology. License agreements are sometimes executed along with research agreements that fund further development of the technologies within the university. These agreements should clearly distinguish between cash received for research and development of technologies and cash received in exchange for access to intellectual property. Because universities have a fiduciary responsibility to distribute the appropriate portion of license income to inventors, university officials should avoid executing research contracts that appear to trade the potential to receive licensing income for sponsored research funding. In *Singer v. Regents*, the University of California ran into this issue with the courts finding that universities don't have the right to trade the inventors' share of license income for research funds.³

As VCU's definition of licensing income above suggests, licensing income may be in the form of noncash payments. Ownership shares in the licensee are common for many licenses to newly formed companies. If the company is successful (e.g., acquired by another company, goes public through an initial public offering, etc.) this equity consideration could be quite valuable. The topic of equity distribution is specifically discussed below. Other forms of licensing income consideration, including tangible and intangible property, are

less common in university license agreements. Before agreeing to accept such forms of consideration, it is best practice to have a plan of how to convert such property into cash for distribution.

Distribution of Gross vs. Net Licensing Income

An institution may incur expenses directly associated with a licensed technology before or after it is licensed. It is common practice to deduct these expenses from licensing income before distribution. Some of the most common expenses are associated with patent prosecution, copyright, and trademark registration protection. There are several other direct expenses that may also be deducted from licensing income, including, but not limited to, marketing fees charged by outside consultants; advertising fees for posting technology summaries; attorney fees for the drafting, negotiation, and maintenance of license agreements; and royalty audit charges. Indirect costs, such as technology transfer personnel salaries or the purchase or lease of office equipment, generally are not deducted from license income.

Each technology transfer office, based on how it is structured and incurs these direct costs, should determine what costs may be deducted from the licensing income prior to distribution. Some institutions employ in-house patent counsel and agents that take care of the majority of patent drafting and filing, while other offices only use outside patent counsel for such activities. An office that uses both internal and external patent counsel for initial patent filings may decide not to deduct any initial patent filing costs from licensing income, or deduct a standard charge, in order to treat all inventions in the same manner. No matter how costs are treated, it is important that the calculation of net licensing income is consistent and appears objective to the inventors. Most importantly, the definition and calculation of net licensing income should be clearly described in an intellectual property policy or similar document.

An intellectual property policy may also detail what percentage of the gross licensing income will be used to reimburse the direct costs. For example, some institutions may choose to apply 100 percent of the gross licensing income toward these expenses until they are fully reimbursed. The drawback of this strategy is that it may prolong the time that inven-

tors have to wait to receive income distribution for a licensed technology.

This is especially true if there are patent costs that are not reimbursed by the licensee and the initial licensing fees are small. As discussed above, a practical purpose for distributing licensing income is to encourage inventor participation in the technology transfer process. VCU employs this philosophy by applying up to 66 percent of the licensing income to reimburse costs and distributing the remaining 33 percent (or more) so that the inventors get some money shortly after the technology transfer office receives it.

Parties to the Distribution

The intellectual property policy should specify all the parties that may receive a percentage of the licensing income. Many universities distribute some of the income to the inventor's affiliated departments and/or schools. Other organizations, including research institutes, may not distribute to departments because of their organizational structure or simply because they chose not to.

The Institution/Technology Transfer Office

Most institutions retain some portion of licensing income to use for a variety of purposes. If the total licensing income for a technology transfer office is low or moderate, these retained funds may be used to supplement the funding of operations or technology transfer-specific initiatives. The Stevenson-Wydler Act encourages federal agencies and laboratories to use some of its retained licensing income to promote entrepreneurship among their employees. Many offices have created successful technology maturation or gap-funding programs that help inventors further develop early-stage technologies to make them more attractive to potential licensees. These funding programs may yield significant returns on investment by increasing the value of early-stage university technology prior to licensure.

Alternatively, technology transfer offices that receive higher levels of licensing income may transfer those funds into their institutions for other purposes, including most of it into the institutions' general funds. This money may be used for institutional projects, including new faculty startup packages, research funds, endowed chair positions, and even to build new research and teaching buildings.

The Stevenson-Wydler Act encourages federal laboratories to use some of the retained

licensing income to reward employees for scientific and technical developments even though such developments may be classified or sensitive and, thus, not transferrable through the classic technology transfer mechanisms. In these cases, the intellectual property policy may not necessarily need to address how much money needs to be transferred into the institution from the technology transfer office. Such a decision may come directly from the institution's president, director, or its board of visitors.

Technology transfer offices that are separate legal entities from their institutions do not necessarily complicate the distribution. These offices may be nonprofit foundations or may be for-profit entities that manage most of the technology transfer process for the institution. These types of offices may require a separate contractual understanding, which will lay out the percentage to be retained by the office before being distributed to all parties in the institution.

Inventors, Authors, and Contributors

The technology transfer office should ensure that distribution of licensing income to inventors is consistent and fair. Failure to appropriately carry out this task may lead to inventor alienation from the official technology transfer process and loss of future intellectual property. An inventor who feels that he or she did not receive a fair share of income not only may withhold disclosure of future inventions, but may also actively discourage other faculty from working with technology transfer. The intellectual property policy should clearly spell out what percentage of licensing income the inventors should expect and when they should expect to receive it.

Universities widely vary in how much licensing income they share with inventors. In addition, some universities have sliding scales that decrease the percentage of license income shared with inventors as the income generated from a particular invention goes up. Lach and Schankerman⁴ surveyed the distribution policies from 102 U.S. universities and compared that data with *AUTM Licensing Activity Survey*TM data collected in the 1990s. For that period and for universities without the sliding scale, they found that the average inventor's share was 41 percent with a range of 25 to 65 percent. They found a much wider range for universities that used a sliding scale to specify distribution with an expected average inventor's share of 51 percent.

Lach and Schankerman also found that there is a positive correlation between the amount of total licensing income a university receives and the percentage of licensing income paid to inventors. This suggests that a generous licensing income-sharing policy encourages successful innovation and commercialization through technology transfer.

In addition, the authors suggest that the distribution policy may act as a sorting mechanism in the faculty-hiring process whereby faculty candidates who are more likely to develop valuable new technologies may seek to be hired by universities with the most generous sharing policies. It would be interesting to know if these correlations still hold true using more recent AUTM and author survey data. It would also be interesting to know if there is a correlation between total licensing income and the share of licensing income that goes to the inventor's lab.

Many institutions have policies that allow the inventors to collectively determine how the inventor's share for their technology will be divided among themselves rather than splitting the licensing income equally. This may allow for inventors/contributors with only minor contributions to technologies to be included in the invention disclosure without too many arguments amongst all the contributors. However, all inventors and contributors should consent in writing to any sharing arrangement other than an equal split. One of the drawbacks of this type of policy is that the inventors may not be able to decide on a split. In these cases, it may be helpful for the institution's intellectual property policy to state that, if the inventors cannot agree upon how to share the inventors' portion of the licensing income, then the income will be shared equally.

In addition to having a policy that specifies the percentage to be shared with inventors and authors of copyrights, institutions must decide if they will share licensing income with contributors who are not inventors or authors of technologies. A contributor, for example, might be an employee who did a lot of the non-inventive bench work behind a particular technology or oversaw the work of programmers writing code for a new software program. For universities, the Bayh-Dole Act only states that inventors should receive some licensing income. For federal laboratories, the Stevenson-Wydler Act does recognize that laboratories may consider compensating collaborators in addition to inventors.

Departments and Schools

Distribution of a percentage of licensing income to the inventor's affiliated department and/or school helps to provide some recognition of the resources that may have been used in developing the licensed technology. In addition, departmental chairs and school deans may view technology transfer more favorably if they have an opportunity to receive some relatively unencumbered funds if their faculty, staff, or students develop commercially viable technologies. It may be beneficial to specifically target department chairs and school deans for technology transfer education and outreach activities so that they, in turn, may encourage their employees to submit invention disclosures.

Many successful technologies result from collaborations across departments or schools. Institutions that allow inventors to decide relative distribution among themselves should define in their policy how the departmental or school shares of licensing income are to be divided up for such collaborative inventions. For example, the departmental distribution may be proportional to the inventorship contribution or the policy may simply state the departmental shares will be divided equally.

Special Considerations

There are a number of situations, some of which are outside the control of the technology transfer office, that may affect the distribution of licensing income. Although it is not possible to discuss every situation, some of the more common examples are given below.

Changes to Intellectual Property Policies and Distribution Formulas

As a rule, policies of an organization require periodic review and, as necessary, modifications to clarify intent or adjust to changing times. Intellectual property policies are no exception. In fact, because intellectual property policies may be relatively new to the scene for many universities (many technology transfer offices were established in the 1980s and 1990s after the passage of the Bayh-Dole Act), there have been some recent growing pains associated with improving these policies.

A common modification is to adjust licensing income distribution formulas. Employees who may develop or already have developed valuable technologies have a vested interest in their institution's distribution formula. As such, it is a good idea to only change the distribution policy through the institution's policy approval process.

In addition, policies should have a clause that states that they are subject to review and amendment according to the institution's approved procedures. If this sort of clause is not present in an institution's intellectual property policy and the institution amends the policy by lowering the percentage of license income to be shared with inventors, then inventors may be able to dispute this if they were hired before the change in policy.

This sort of situation occurred in a lawsuit⁵ between Douglas Shaw, an inventor, and the University of California (UC). Between the time Shaw was hired and his development of new, commercially valuable strawberry strains, UC reduced the licensing income distributed to inventors in its intellectual property policy. Shaw was able to successfully persuade the court that he was hired under a binding contract that did not have a provision that stated it was subject to change by the university. The court determined that Shaw should receive the higher rate under the policy in place at the time of his hiring rather than the policy in place at time the invention was disclosed to UC.

Adherence to the intellectual property policy does not, however, prevent all the parties associated with a particular technology from agreeing to an alternate distribution formula for that particular invention. For example, the inventors may collectively decide that they want their portion of the licensing income to go back into the research program rather than to them personally. Inventors should be advised that there might still be tax implications associated with this forgone personal income. TechTransfer at University of Michigan has posted some tax guidelines for their inventors who are considering waiving their share of licensing income.⁶

Inventorship Disputes

A dispute between inventors has the potential to derail all the efforts of the technology transfer office in commercializing the invention. Inventorship disputes over license income distribution may develop over who is listed as an inventor and/or contributor on the invention disclosure and any resulting intellectual property or may come in the form of who contributed the most and should get the greater portion of licensing income.

Determining who actually should be listed on an invention disclosure or patent application can be challenging if the researchers cannot agree. If a patent is involved, a patent attorney may be brought in to interview the researchers to determine who should be listed as an inventor on a patent. Although this costs money, it can add an element of objectivity to the discussion and will help to educate the researchers about inventorship. After determining who is an inventor, any contributors could be added to the disclosure by the inventors.

For those cases in which these issues still cannot be resolved, the researchers may use the dispute mechanisms in the intellectual property policy to try to resolve the misunderstanding. Having a clearly defined and impartial dispute mechanism built into the intellectual property policy may help avoid escalation of the dispute beyond the boundaries of the institution and into the courts. Many institutions, including VCU, have a standing dispute resolution committee made up of faculty and staff outside of the technology transfer office. These committees usually report their recommendations directly to the vice president for research, president, or similar senior official.

Distribution of Equity as Licensing Income

Many technology transfer offices accept equity ownership in some of the companies to which they license. Startup companies generally are much more willing to give equity rather than cash. In some cases, the initial equity received ends up being more valuable than other forms of consideration given in license agreements.

For example, Stanford's Office of Technology Licensing executed an exclusive license agreement in 1999 with a newly formed startup company named Google. In lieu of an upfront licensing fee, it accepted stock in the company. In 2004, Google went public, and the following year, Stanford sold Google stock for \$336 million.⁷ Although most technology transfer offices do not report such dramatic success in liquidating their equity holdings, many offices have been able to sell some of their equity holdings once they become public or have realized gains when the licensee was purchased by a third party.

Acceptance of equity in startup licensees poses a challenge in licensing income distribution for two reasons. First, the equity may never become liquid. It may take a number of years, if ever, before the company goes public or gets acquired and allows the institution to cash out its equity. This means that the office either has to hold on to the inventors'

share of the equity until the liquidity event or must ask the licensee to issue stock certificates directly to the inventors at the time the license is executed. This distributed equity may be in addition to the equity that entrepreneurial inventors may receive as founders of a startup.

The second challenge with taking equity is that, at least initially, the office may have difficulty valuing the shares received from a license. If a company has not yet gone through a financing event, such as venture capital investment, that would require a professional valuation of the company, then a technology transfer office will find it difficult to assign a dollar value to the equity it holds in the company. Without a firm dollar value to the inventor's share of equity, the institution cannot distribute cash to the inventors as an equivalent to the equity held. This second challenge makes it very unlikely that the equity would be initially distributed as cash.

These challenges leave technology transfer offices with two choices: distribute the inventors' share of stock once it is received by the office or hold on to the inventors' share until the office is able to convert the shares into cash. Some offices may choose to immediately distribute the equity rather than assume the fiduciary responsibility of managing this investment on behalf of the inventors.

On the other hand, inventors may not want to deal with this responsibility themselves. In addition, if there is ongoing collaboration between the institution and the licensee that involves an inventor working on the university side of the collaboration, then the equity personally held by the inventor may raise conflict-of-interest concerns within the institution. This is not as much of a problem if the inventor already holds founder's equity. Many institutions have policies to hold onto the equity without distribution until the equity is liquid. Many of these offices that hold onto the equity, either within their foundations or their treasury offices, have a policy to sell the equity as soon as possible rather than to try to wait until the equity becomes more valuable.

Effect of Sponsor Contracts on Distribution

The funding used in the development of an invention may have an impact on the distribution of licensing income for that invention. For example, some unusual forms of federal

grants require that funds received from the licensing of technologies developed under the grant shall be used for further research and not distributed according to the intellectual property policy. Some nonprofit funding foundations expect to receive some share of the licensing income for the inventions created using their money. Usually their share is taken off the top before any funds are distributed according to policy. Institutions should clearly communicate intellectual property ownership or licensing terms or any stipulations concerning the distribution of licensing income to the researchers at the time a funding award is made. In addition, the intellectual property policy should address these situations by allowing flexibility in license income distribution.

Distribution for Jointly Owned Intellectual Property

Many institutions deal with jointly owned intellectual property on a regular basis. Interinstitutional or royalty-sharing agreements may affect licensing income distribution within each institution depending on how these agreements are structured. Typically, the lead institution for licensing will first distribute any licensing income between the institutions and then each institution will distribute the income according to its own policies. Less typical are agreements that call for the lead institution to distribute licensing income directly to the other institution's inventors in addition to their own. This may be acceptable for some institutions, but should be anticipated by the institutions' policies.

It is not uncommon for a technology transfer office to receive an invention that lists a nonaffiliated outside inventor. If it is acceptable to the outside inventor and the institution, the institution may accept assignment from the outside inventor and then treat that inventor as its own for the purposes of licensing income distribution.

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Notes

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