Intellectual Property
Fall 2019
Writing Assignment

I graded, as I always do, using a checklist. (E.g., "Uplift does not have an NDA in place with the previous users of its prototype machines.") The bullet points in the following outline do not correspond one-to-one to the items on my checklist, but they do reflect the overall weight I put on different parts of the analysis. As you can see, I hoped that you would devote about half of your discussion to patent, as this is the most promising type of IP protection available to the client.

I gave one point for each item on the checklist that your answer identified and gave a substantially correct answer to. Identifying the issue with no analysis, or a significantly incorrect analysis, was worth half a point. A particularly good analysis of an item — either exactly and meticulously correct, or saying something interesting I hadn't anticipated — was worth an extra bonus point. I reserved a final four points for writing and organization. Overall scores ranged from 19 to 35, which I then mapped onto a letter-graded curve. Overall, your memos ranged from good to excellent and displayed a solid understanding of the course material.

I will of course be happy to discuss your essays and your grades with you if you have any questions.

Undeveloped Ideas

Uplift is not likely to be able to protect its designs and business models using NDAs:

- The hundreds of people who have already tried the prototype pull-down machines are not under NDA and it is not possible to put them under one retroactively.
- Even if all *buyers* of the machines sign NDAs, it will be practically impossible for Uplift to ensure that all *users* of the machines do.

- Uplift will find it almost impossible to discover who leaked the crucial details once they get out.

Trade Secret

Trade secret is not likely to be effective at protecting Uplift's business model.

- The designs, exercise routines, and business plan are proper trade secret subject matter: they confer competitive advantages over other exercise companies that cannot offer them. UTSA § 1(4)(i).
- The designs, exercise routines, and business plan are all currently actually secret. Some people have used the machines, but few of them will be familiar with the designs (especially the ones still in production), and the exercise routines have never been revealed outside of Uplift.
- Trade secret will not protect against competitors who have the same idea (increasing resistance), even if they observe it from seeing Uplift's success, and then independently invent their own increasing-resistance designs, even if those designs are the same.
- Trade secret will not protect against competitors who buy one of Uplift's machines and reverse engineer it. As owners of a machine, they are free to remove sealed plastic cover to study the mechanism underneath. A company whose business model involves selling machines to numerous buyers will not practically be able to keep them from falling into competitors' hands, even if it tries use NDAs. To make use of full trade secret protection, Uplift would need to *only* make its machines available in its own gyms. This would severely limit its growth rate, as gyms are more capital-intensive and require much more management than selling gym equipment.
- Uplift will necessarily disclose significant information about the designs and exercise routines as part of commercializing the technology. To attract buyers and users, it will promote the health benefits of using increasing-resistance machines and teach users how to do effective workouts with them. Maintaining secrecy over the details would undercut the marketing Uplift needs to do to succeed.

Patent

Patents will provide protection for Uplift's specific nested-cam-pulley-based designs but will not prevent competitors from selling their own increasing-resistance machines.

- Uplift could apply for a family of overlapping patents (although some of these have problems, as noted below). All of these are proper patentable subject matter: the exercise machines are "machines" and the exercise routine is a "process." 35 U.S.C. § 101. All of them have utility, as more effective workouts are a specific and substantial utility and the machines are all operable or will be so within months.
  - An increasing-resistance exercise machine would not be novel over the Jones prior art (the Catapult machines), which are also increasing-resistance exercise machines.
  - An increasing-resistance exercise machine with a weight stack (or, more generally, an increasing-resistance exercise machine with an adjustable starting weight) would be novel over Jones. It would probably also be nonobvious, although this would require more research into the prior art in the exercise-machine field. *Cf. KSR*.
  - A nested cam pulley would not be novel over the construction robot prior art, which uses nested cam pulleys.
  - An exercise machine with a nested cam pulley would appear to be novel over the construction robots. It would also probably be nonobvious, as construction robots are not relevant prior art. They are not in the same technical field as exercise equipment and there is no evidence that the nested cam pulleys solve the same specific problem in both settings. *In re Clay*.
  - An exercise machine with a nested cam pulley and a built-in limiter would be novel, but it might be obvious over an exercise machine with only a nested cam pulley, if the drawbacks of a limiter-free design were readily apparent during testing. *See KSR* (discussing teaching, suggestion, or motivation test).
  - The eight specific designs are probably novel. They may, however, be obvious applications of the basic nested cam pulley design once the inventor has a specific type of exercise machine as a goal.

- The method of exercising on an increasing-resistance machine is novel and appears to be nonobvious as it requires extensive use of an adjustable increasing-resistance machine to conceive of. It may be quite difficult to enforce against end users, however, as it will not be easy to detect when they are exercising in this specific fashion. Perhaps an inducing infringement claim could succeed against a competitor who sold increasing-resistance machines and described in detail how to use them.

- A patent-based strategy will necessarily have to disclose to the public the details of how to construct an adjustable increasing-resistance exercise machine using nested cam pulleys (otherwise none of the patents will be enabling). *See, e.g.*, *Wyeth & Cordis*. This is fine, given the severe limitations of secrecy-based IP strategies.
- Franz and Sandow appear to be coinventors of the basic nested cam-pulley design. Sandow appears to be the inventor of the improved design with a limiter, and Sandow and the other engineers are the inventors of the eight specific machine designs. Franz appears to be the inventor of the workout routine method. All of these people should have employment contracts that assign ownership of their exercise-related inventions to Uplift, past and future, if they do not already.
- Implosion may have ownership rights under its contract with Franz to the initial design with a nested cam pulley. Part of this invention was conceived by Franz while an Implosion employee, and it is in the same field as his work there. Implosion may also have a shop right over this invention, as the first prototype was tested at Implosion's facilities.
- The testing at Implosion in 2017 is a public use and the limited control over the testing conditions appears to make it not an experimental use. *Lough*. Therefore, the invention as used in 2017 (i.e., now outside the one-year grace period) — the pulldown with a nested cam pulley but without a limiter — is now prior art and unpatentable.
- The testing in Sandow's garage in 2018, even though it is more than one year previous, appears to be an experimental use under con-

trolled and reasonably confidential conditions. Thus, the design with a limiter remains novel and patentable.

- The disclosures to Atlas are not a printed publication, as the information was not made public. They are also not a public use: describing the technology to a person is not a use.
- The machines have not been placed on sale so the on-sale bar has not been triggered.
- Even restricted to designs with limiters, this patent family will be useful against competitors: it will allow Uplift to go to market while preventing competitors from directly duplicating its designs. They will need to invent around, ether selling less useful configurations or developing entirely new ways to create adjustable increasing-resistance machines. Uplift will not have the market entirely to itself, but if it moves quickly to scale up, it should have substantial market share before facing serious competition. I recommend not launching until both the production capacity and patent applications are in place.

Copyright

Copyright will provide limited protection for the book and website, but no control over the machines or workout routines.

- Franz has a copyright in the text of the book he has written. As in *Baker v. Selden*, even where a system is uncopyrightable, a book about the system can be original and copyrightable. Competitors will not be able to duplicate the book.
- If Uplift hires a photographer, the photographs for book and website will be original and copyrightable. *Burrow-Giles*.
- These copyrights do not extend to the exercise routines that the book describes, as an exercise routine is an uncopyrightable idea. *Bikram Yoga*. Anyone can do the exercises, and anyone can write a book describing them in different words.
- This is not a serious problem: as long as Uplift sells the most useful machines for doing these exercises, people who want to do these routines will need to find an Uplift machine. Uplift should treat the

book, photographs, and website as a marketing tool to help sell machines.

- [We have not discussed this in class yet, but Uplift probably cannot obtain a copyright on the designs of the machines:. They are useful articles, and the aspect that Uplift seeks to protect is the functional aspect, not the expressive aspect.]

[**Miscellaneous**

We have not discussed design patent in class yet, but design patent is highly relevant to the machines. We have covered trademarks, but the question specifically excluded trademarks from the scope of what I asked you to discuss.]

Practical Next Steps

- Uplift should apply for a patent or patents on adjustable and weight-stack-based increasing-resistance exercise machines, on the nested cam pulley design, on the built-in limiter improvement, on the eight specific designs, and Franz's new increasing-resistance exercise method.
- Uplift should apply for copyright registrations on the book and photographs when they are completed.
- All of the founders and employees of Uplift should have NDAs and invention assignment agreements.
- The photographer should either be an Uplift employee or required to execute an agreement transferring all copyrights in the photographs to Uplift. The glossy book might be an "instructional text,"17 U.S.C. § 101 so that it could qualify as a specially commissioned work made for hire, but it is best not to rely on this classification. An explicit agreement transferring ownership would be better.
- A. Torney should conduct a patent search to make sure that the machines will not infringe on any other companies' patents.
- A. Torney should examine Franz's employment contract with Implosion for any IP-related clauses.