

On May 8, 2014, multiple news sources reported that Apple, Inc. was close to acquiring Beats Electronics LLC for \$3.2 billion.¹

Beats Electronics LLC (Beats), founded by Dr. Dre and Jimmy Iovine, is about to become Apple's biggest acquisition to date. But is Apple over-paying for the company? Beats makes headphones, earphones, and speakers, and has a patent application pending at the World Intellectual Property Office for BeatsAudio sound augmentation software technology. In addition, it has a streaming music subscription service, Beats Music which it acquired when it purchased MOG, Inc. in 2012. It has license agreements with Chrysler and Hewlett Packard to include Beats Audio in their products.

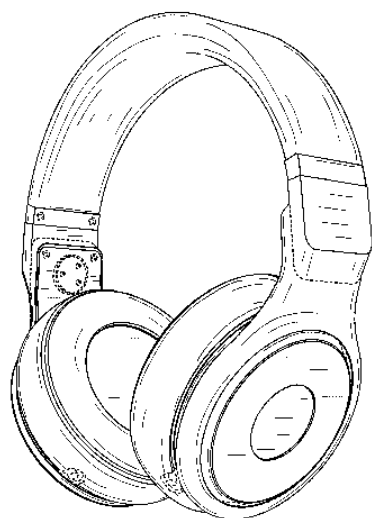


FIG. 1

Beats' headphones have reinvigorated the headphone market which surpassed \$1 billion in 2013² and Beats represents 59% of the high-end headphone market.³ The style, design, logo, trademarks, and celebrity endorsements of its headphones make Beats a highly valuable brand with annual sales approximately \$1 billion in 2013.⁴

Figure 1: Drawing from a Beats' US Design Patent

Speculation has abounded that Apple is acquiring Beats for its streaming music service as a way for iTunes Radio to compete with Pandora Media Inc. and Spotify for the streaming music subscriber market. Despite the fact that the market size is only \$1.5 billion in advertising and subscription sales,⁵ it is a coveted market for giants like Apple and Google who fear falling sales in music downloads.⁶

However, no one is asking if Beats has the actual assets to be in the streaming music business, or even the audio software business. Is this valuation purely an overpriced speculation? Is the addition of Beats' intellectual property portfolio

actually accretive to Apple's quest for a major play in the streaming music subscriber market? Or is the acquisition a move to hire Jimmy Iovine and Dr. Dre?⁷

Analysis

Looking at Beats' intangible assets, we found a United States trademark application for "IBEATS" filed April 25, 2014 owned by Beats. This suggests that Beats is committed to the acquisition; since Apple is well known for adding the letter "I" in front of its products. We also looked at the Beats patent portfolio using our proprietary analytical systems, which consists mainly of US design patents for audio listening systems and headphones.

¹ <http://www.latimes.com/entertainment/envelope/cotown/la-et-ct-apple-beats-electronics-3-2-billion-20140508-story.html>

² [https://www.npd.com/wps/portal/npd/us/news/press-releases/premium-us-headphone-market-surpasses-\\$1-billion-in-2013-according-to-npd/](https://www.npd.com/wps/portal/npd/us/news/press-releases/premium-us-headphone-market-surpasses-$1-billion-in-2013-according-to-npd/)

³ http://www.slate.com/articles/technology/technology/2013/09/beats_by_dre_market_share_how_the_headphones_company_conquered_the_market.html

⁴ <http://www.fastcompany.com/3015051/major-beats-beats-electronics-may-be-on-track-to-hit-14b-in-2013-revenue>

⁵ <http://www.prweb.com/releases/2014/01/prweb11528762.htm>

⁶ <http://www.billboard.com/biz/articles/news/digital-and-mobile/5855162/digital-music-sales-decrease-for-first-time-in-2013>

⁷ <http://www.macrumors.com/2014/05/09/drdre-and-jimmy-iovine-to-join-apple/>

In addition, Beats claims to have patented software technology which underlies the BeatsAudio brand. It does have a pending patent application on audio software, as mentioned above, World Intellectual Property Organization Publication No. 2012177572A3. Unfortunately, until the application issues in the United States, this area of Beats' market share is unprotected in the US.

As for Beats Music, most of its intangible assets come from the 2012 acquisition of MOG. Below is a view of two of MOG's patents.

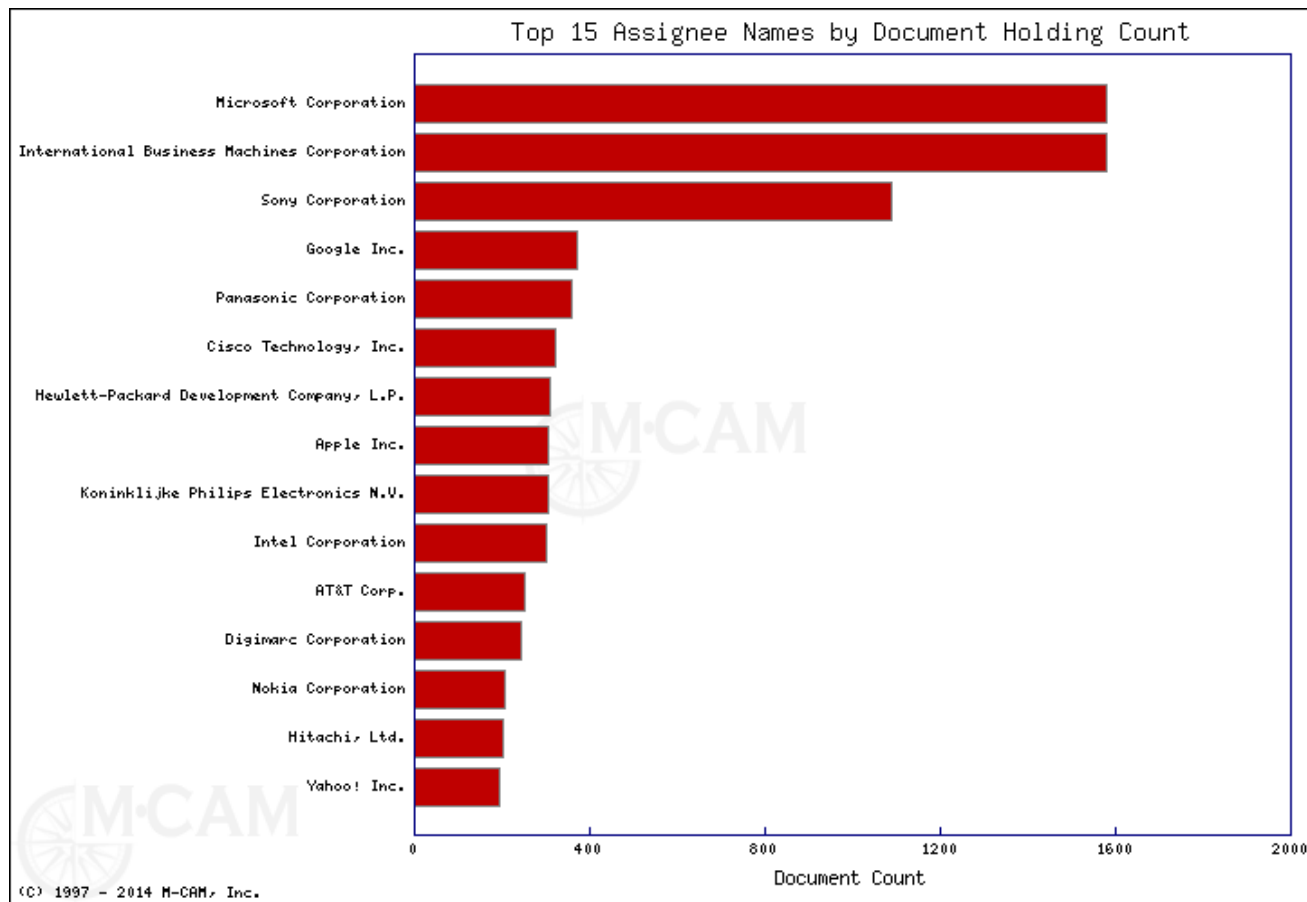
Document #	Title	Assignee Name	Priority	File	Issue
U.S. 7,685,132	Automatic meta-data sharing of existing media through social networking	MOG, Inc	15-Mar-06	15-Mar-06	23-Mar-10
U.S. 20120023405	DYNAMIC CONTROL OF SONG FREQUENCY IN A PLAYLIST PROVIDED THROUGH A MUSIC SERVICE	MOG, Inc	11-Feb-10	13-Oct-11	26-Jan-12

The first is for a patent to share music and media preferences in a social network. The second is an application for song frequency in a playlist. Unfortunately, neither of these can be said to be controlling or even owning rights to the streaming music subscriber market.

M-CAM looked at two more patents, held by Spotify and Pandora Media, Inc., which would be representative of part of the streaming music subscriber space.

Document #	Title	Assignee Name	Priority	File	Issue
U.S. 8,316,146	Peer-to-peer streaming of media content	Spotify AB	13-Jul-07	13-Jul-07	20-Nov-12
U.S. 8,306,976	Methods and systems for utilizing contextual feedback to generate and modify playlists	Pandora Media, Inc.	16-May-01	16-May-11	6-Nov-12

These assets do not exist in a vacuum and their expanded universe is filled with technology giants attempting to own the streaming music subscriber market. The chart below shows other entities involved in the technology space of the streaming music subscriber market.



Entities such as Microsoft Corporation and IBM hold a large amount of patents in the streaming music subscriber space but this graph also contains overlap from most of the major phone and technology giants, and it includes a fair amount of overlap from the networking space.

Since Apple is in the middle of the pack on the graph, this would indicate that Apple already owns part of the streaming music subscriber market. It is also not likely that Apple is purchasing Beats for its subscriber base, since it only has 200,000 users at present.

The apparent upside which Apple sees in Beats, besides the headphones brand, is the creativity of two of the biggest names in music, Jimmy Iovine and Dr. Dre.

Conclusion

Tim Cook has been reported as saying that he asks two questions when considering an acquisition: "Would it help us make a great product and would the culture fit at Apple?"⁸

One could argue that Apple needs Jimmy Iovine and Dr. Dre to add to the culture at Apple which has been notoriously lacking in creativity in recent years. The other thing Apple products have been lacking: great sound quality. Complaints about Apple TV and iTunes poor audio quality are numerous on product support forums.

It is unfortunate that Beats lacks protection in its domestic market for Beats Audio software technology, but this does not preclude the overall Beats brand from potentially accretive value for Apple. Apple's purchase price for Beats may not be justified by the existing Beats intellectual property portfolio; whether the contributions of Iovine and Dre make up the difference remains to be seen.

For a more detailed examination of the patents mentioned in this report, please contact us at patentlyobvious@m-cam.com.

⁸ <http://9to5mac.com/2014/05/09/opinion-what-is-apples-thinking-in-spending-3-2b-on-buying-beats/>

M·CAM's Patent Glossary

<u>Aligned Sector:</u>	The business sector in which the product(s) resulting from the patent(s) is currently or intended to be sold.
<u>Applicant:</u>	The person or corporation that applies for a patent with the intent to use, manufacture or license the technology of the invention; under U.S. law, except in special situations, the applicant(s) must be the inventor(s).
<u>Application:</u>	Complete papers submitted to the U. S. Patent and Trademark Office seeking a patent including oath, specification, claims, and drawings. This usually does not signify a Provisional Patent Application, but only a regular patent application.
<u>Art:</u>	The established practice and public knowledge within a given field of technology. This also identifies a process or method used to produce a useful result. A term used in consideration of the problem of patentable novelty encompassing all that is known prior to the filing date of the application in the particular field of the invention.
<u>Assignee:</u>	The person(s) or corporate body to whom the law grants or vests a patent right. This refers to the person or corporate entity that is identified as the receiver of an assignment.
<u>Business Method</u>	
<u>Patent:</u>	A patent that controls the way a business process is undertaken. The issuance of these patents by the United States Patent and Trademark Office (USPTO) is new and controversial, since many allege that it is unfair to allow a patent on a way of doing business.
<u>Citation:</u>	This may include patents or journal articles that the applicant or examiner deems relevant to a current application. A reference to legal authorities or a prior art documentation are examples of a citation.
<u>Claim:</u>	The language in a patent application that defines the legal scope of the patent. Most patents have numerous claims. This is typically the single most important section in the application.
<u>Concurrent Art:</u>	Concurrent art occurs when related patent applications are being examined by the USPTO at the same time. It is difficult for any company or inventor to know, at the time they file for a patent, whether a "related" patent application exists.
<u>Filing Date:</u>	The date when a properly prepared application reaches the patent office in complete form.
<u>Innovation Cycle:</u>	A description of the commercialization timeframe for the intellectual property.
<u>Innovation Space:</u>	M·CAM's representation of the innovation(s) that occur before, during, and after the pending period of the subject patent. The innovation space is the first place to look for patents that are closely related to the subject patent and that may impact the defensibility of the subject patent or create opportunities for patent licensing.
<u>Issue Date:</u>	Not to be confused with the filing date, which is the date the patent application was physically received by the U.S. Patent and Trademark Office. This is the date on which the patent actually issues.
<u>Non-Aligned</u>	
<u>Sector:</u>	Any sector in which the patent can be used or sold, other than the sector for which the patent or resultant product was invented or intended.
<u>Pod:</u>	A group of patents owned by a company that should be treated as a single unit of innovation (e.g., a certain group of patents that comprise a single product or multiple related products).
<u>Prior Art:</u>	Any relevant patent that was issued before the patent being analyzed. If this previous patent was specifically mentioned in the new patent's application, the previous patent is referred to as "cited prior art". If it was NOT mentioned, then that previous patent is referred to as "uncited prior art".
<u>Subsequent Art:</u>	Any patent that has a filing date with the USPTO that is after the issuance date of the subject patent. This subsequent art patent may or may not have cited (see "Citation" above) the subject patent. As subsequent art represents more recent innovation than the subject patent, it has great potential to shrink the market opportunity for the subject patent.

A Brief Primer on the Patent System

In recent years, the importance of patents and intellectual property rights as an important variable in the marketplace has come to the forefront of the public consciousness as world leaders declare their country's lead in the innovation race. Damaging intellectual property litigation is becoming increasingly common across all industries. This is exacerbated when patent rights are granted for non-novel ideas. A vast amount of precedent innovation is unconsidered by patent-granting authorities in the creation of new IP rights. Patent granting authorities including the United States Patent and Trademark Office (USPTO), European Patent Office (EPO), Japanese Patent Office (JPO), Chinese State Intellectual Property Office (SIPO), Korean Intellectual Property Office (KIPO) and many others are constrained by the use of patent classification systems which are routinely circumvented by patent applicants.

There is a two-way social contract underlying the patent system. In the United States, patent terms are generally limited to 20 years from the date of application. By statutory intention, once a patent has expired, the patent holder loses the right to exclude others from fully utilizing any innovation described in the patent. A large number of patents enter the public domain when they are "abandoned" – when owners discontinue paying patent maintenance fees. Patents also only provide an exclusionary right in the country for which the patent is filed. As demonstrated by the Global Innovation Commons⁹ (G.I.C.), using intellectual property available in the public domain eliminates the need to pay licensing fees on those innovations in countries where the patent was never registered, or worldwide, if abandoned.

Patently Obvious® is a weekly report focusing on select groups of patents in order to increase transparency in markets, addressing information asymmetries, and providing a more level playing field for all parties.

The information in this report was prepared by M-CAM, Inc. ("M-CAM"). M-CAM has used reasonable efforts in collecting, preparing and providing quality information and material, but does not warrant or guarantee the accuracy, completeness, adequacy or currency of the information contained in this report. Users of the information do so at their own risk and should independently corroborate said information prior to any use of it. M-CAM is not responsible for the results of any defects that may be found to exist in this material, or any lost profits or other consequential damages that may result from such defects. The information contained in this report is *not* to be construed as advice and should not be confused as any sort of advice. M-CAM does not undertake to advise the recipient or any other reader of this report of changes in its opinions or information. This information is provided "as is." M-CAM or its employees have or may have a long or short position or holding in the securities, options on securities, or other related investments of companies mentioned herein. This report is based on information available to the public.

⁹ <http://www.globalinnovationcommons.org/>