

Why "two bites"? Because it's a reference to double patenting, an illegal abuse of the patent system. You know, what USPTO patent examiner, Mr. Andres Gutierrez said of Apple's latest slide-to-unlock patent, before he rejected EVERY claim Apple was applying for, THREE separate times, in this issued continuation (read: we want to get credit for an earlier patent's priority date) of ANOTHER slide-to-unlock patent.

That's a lot of CAPS, so let's unpack this apple cart piece by piece (and watch this circular firing squad composed of Deranged Easter Bunnies – last week's theme – since we're seeing a trend here when it comes to patent quality.)

A Rose By Any Other Name...

What is double patenting? Let's put it this way: what's the difference between a mouse and a Chinese hamster? It's the difference between Columbia University continuing or not continuing to rake in *hundreds of millions* in licensing fees over its gene-splicing patents.¹ In 1983, Columbia University had a patent for splicing the genetic code of mice approved by examiner Esther Kepplinger (keep this name in mind because this Easter Bunny shows up again). Columbia knew this patent, as well as the cash flow around it, would eventually expire. So while the first patent was still live, Columbia filed numerous continuation applications to "keep spawning 'children' of the issued patents" (as one lawsuit against them aptly described it²) and keep the license money flowing.

One of these "spawns," U.S. Pat. No. 6,455,275 (or "the '275"), uses the equivalent gene-splicing technology, but changes the focus from "eucaryotic cells of mammalian origin" to "Chinese Hamster" cells. So, what's the difference between a mouse and a Chinese hamster? Nothing, according to the original examiner of this patent, James Ketter, which is why the patent was rejected on grounds of double patenting. Well, initially anyway, until the new Deputy Commissioner for Patent Operations, *Esther Kepplinger* (the one examiner who knew the original technology better than anyone!), objected and eventually overruled Mr. Ketter's finding, replacing him with a new examiner who approved the patent immediately.

Columbia caught so much flak from its licensees over its double-patenting and patent extension efforts (because did we mention they fought to keep Congress from closing continuation loopholes in 1994?³) that, in response, they abandoned one whole continuation patent. Patent '275, however, is still "live" and well.⁴

Excerpt of claims from the Columbia University patents	
Processes for inserting DNA into eucaryotic cells and for producing proteinaceous materials U.S. 4,399,216; Issued 1983	DNA construct for producing proteinaceous materials in eucaryotic cells U.S. 6,455,275; Issued 2002
1. A process for inserting foreign DNA I into a suitable eucaryotic cell which comprises cotransforming said eucaryotic cell with said foreign DNA I and with unlinked foreign DNA II which codes for a selectable phenotype not expressed by said eucaryotic cell , said cotransformation being carried out under suitable conditions permitting survival or identification of eucaryotic cells which have acquired said selectable phenotype, said foreign DNA I being incorporated into the chromosomal DNA of said eucaryotic cell .	1. A transformed Chinese Hamster Ovary cell comprising a DNA construct comprising DNA I encoding a proteinaceous material foreign to the Chinese Hamster Ovary cell and linked thereto DNA II encoding an amplifiable dominant selectable phenotype not expressed by such Chinese Hamster Ovary cell prior to transformation with the construct, the construct being effective for producing the proteinaceous material when the construct is introduced into the Chinese Hamster Ovary cell , wherein the construct is stably incorporated into the chromosomal DNA of the transformed Chinese Hamster Ovary cell .

All of this to say that when we read that Apple's newest slide-to-unlock patent, U.S. 8,046,721, was rejected from the beginning on grounds of double-patenting, we tend to think of mice and hamsters and loopholes – oh my! See for yourself:

¹ <http://news.findlaw.com/hdocs/docs/biogen/biogenlmbia71503cmp.pdf>

² *Ibid*

³ *Ibid*.

⁴ As alive as Esther Kepplinger, who transferred from the USPTO to Wilson Sosini in 2005 – perhaps just in time to work with Intellectual Ventures over antitrust matters – as alluded to in the opinion of *Intellectual Ventures I LLC v. Check Point Software Technologies Ltd. et. al.*

Excerpts from the USPTO's rejection letters of Apple's '721 patent ⁵

Non-Final Rejection (1/29/2010)	Final Rejection (9/17/2010)	Non-Final Rejection (2/7/2011)
<p>Claims 1-12 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-2, 4-5, 7-9, 11-26 of U.S. Patent No. 7,657,849. This is a non-provisional obviousness-type double patenting rejection. Although the conflicting claims are not identical, they are not patentably distinct from each other because the two applications describe a method for unlocking a device by moving an image.</p>	<p>6. Claims 1-4, 7-8, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Timo Tokkonen (US 7627904 B2) in view of Gauthey et al (US 7286063 B2)</p> <p>7. Claims 5-6, and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Timo Tokkonen (US 7627904 B2) in further view of Peter Astheimer (US 2008/0134170 A1)</p> <p>8. Applicant's arguments with respect to claims 1-12 have been considered but are moot in view of the new ground(s) of rejection.</p>	<p>4. The Finality of the previous office action has been withdrawn, Examiner had agreed during an interview with the applicant held on 11/02/2010 that the previous action sent on 9/17/2010 should have been a non-final rejection since a new reference was used to read on applicants claimed invention.</p> <p>7. Claims 1-4, 7-8, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Timo Tokkonen (US 7627904 B2) in view of Gauthey et al (US 7286063 B2)</p> <p>8. Claims 5-6, and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Timo Tokkonen (US 7627904 B2) in view of Gauthey et al (US 7286063 B2) in further view of Peter Astheimer (US 2008/0134170 A1)</p> <p>9. Applicant's arguments with respect to claims 1-12 have been considered but are moot in view of the new ground(s) of rejection.</p>

Don't Stop Til You Get Enough

In addition to these rejections, Apple's '721 patent, like Columbia's "Chinese hamster" patent, is a continuation of Apple's previous slide-to-unlock patent, U.S. 7,657,849. As we alluded to before, continuations are attempts to extend the statutory enforcement effectiveness of an older patent by not only getting the twenty year cycle of the new patent, but reaching back to make use of the older patent's priority date. One reason for doing this is to be able to assert damages previous to when you "invented" the new technology (would Apple ever do this?). Another reason, like the Columbia patent story referenced above, is to keep the "no trespassing" sign up a little longer. Pharmaceutical companies notoriously love to do this to keep generics from encroaching their profits - one reason Congress amended the patent law to close application loopholes in 1994.⁶

Like Columbia, Apple probably figures touch screens are going to be around for more than the life-span of their current slide-to-unlock patent, hence the filing of a continuation. Or maybe they saw what other touch screen OS technology was occurring around them, and decided to back-fill its '849 patent with new product information developed by themselves and third parties. Unfortunately for Apple, the patent examiner didn't allow the '721 patent to lengthen the life of the '849 one, per a terminal disclaimer, but Apple could still use the '849's priority date to sue over the '721 patented technology.

Rejected

So double-patenting, extension of patent life... and we've not even carved this whole jack-o-lantern yet. Let's look at the claims for which Apple had originally applied, and what claims were eventually approved, **even after having every one of the claims rejected three separate times.**

⁵ <http://portal.uspto.gov/external/portal/pair>

⁶ https://www.depo.com/resources/aa_thediscoveryupdate/torpedoing.html

Excerpts of claims of the '721 patent

Differences highlighted in red

Original application claims	Issued patent claims
<p>1. A method of unlocking a hand-held electronic device, the device including a touch-sensitive display, the method comprising: detecting a contact with the touch-sensitive display at a first predefined location corresponding to an unlock image; moving the unlock image on the touch-sensitive display in accordance with movement of the contact while continuous contact with the touch screen is maintained; and unlocking the hand-held electronic device if the moving the unlock image on the touch-sensitive display results in movement of the unlock image from the first predefined location to a predefined unlock region on the touch-sensitive display.</p>	<p>1. A method of unlocking a hand-held electronic device, the device including a touch-sensitive display, the method comprising: detecting a contact with the touch-sensitive display at a first predefined location corresponding to an unlock image; continuously moving the unlock image on the touch-sensitive display in accordance with movement of the contact while continuous contact with the touch screen is maintained, wherein the unlock image is a graphical, interactive user-interface object with which a user interacts in order to unlock the device; and unlocking the hand-held electronic device if the moving the unlock image on the touch-sensitive display results in movement of the unlock image from the first predefined location to a predefined unlock region on the touch-sensitive display.</p>

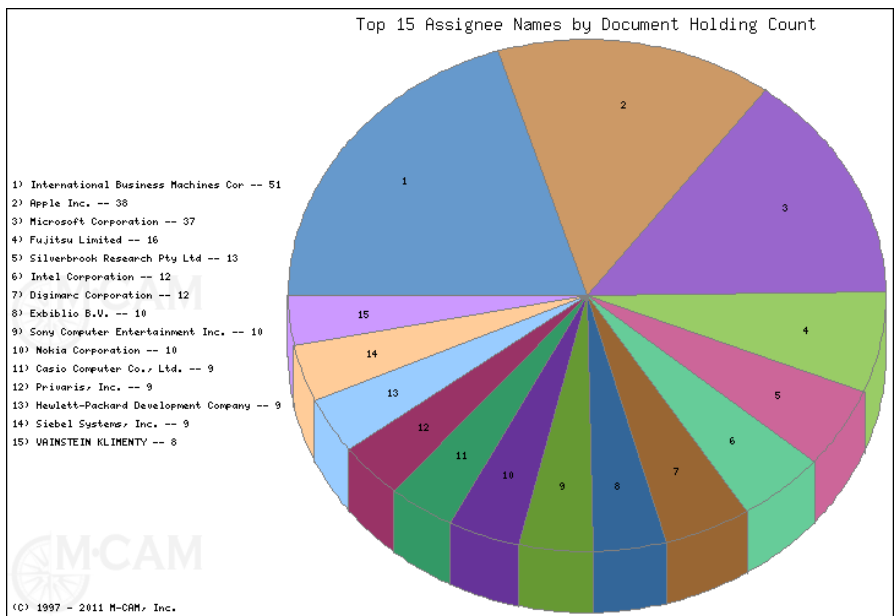
Evidently, restating the purpose of the patent – that one touches and drags the image continuously – makes it novel and non-obvious after three rejections. Mr. Andres Gutierrez is two for two in issuing an Apple slide-to-unlock patent. Maybe a third is in order? (Except this time, he should make sure Apple specifies that the interactive user-interface object that the user interacts with interactively actually *stops* when it unlocks the screen rather than extending the long, painfully slow finger drag infinitely, or at least until the Easter Bunny says “Stop”.)

Precedent Innovation

And finally, as if this patent hasn't already imploded on itself like a rotting pumpkin – and this just from evidence easily seen by going to the USPTO website – we have some patents that may have been of interest to Mr. Gutierrez, had he had visibility into the surrounding space.

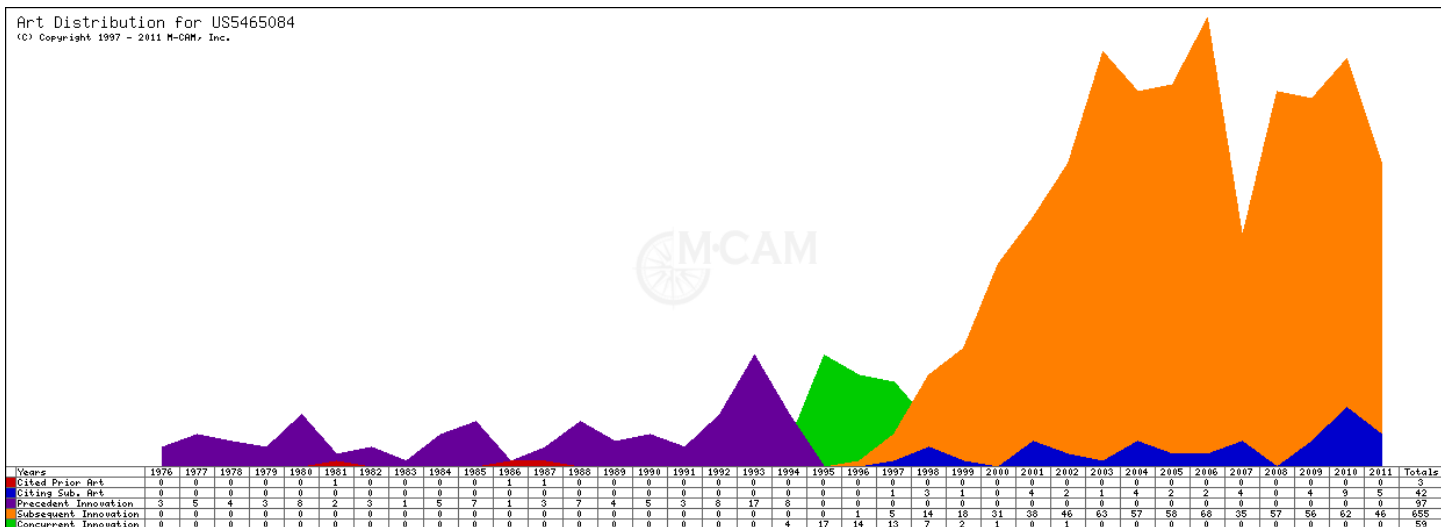
First, there are over eight hundred relevant patents that precede the '721 by a year, that both Apple and Mr. Gutierrez fail to cite, though 38 of these are **owned by Apple themselves**. The entities in this relevant space are displayed visually to the right.

In addition, we have a list of 120 related patents, with priority dates of a year before both slide-to-unlock patents, that are in the public domain (read: this technology is FREE TO USE and NOT PATENTABLE AGAIN). A sample of these can be found in Appendix A.



But we're not done. Going back to the patents the examiner used as evidence to reject the claims of the '721 patent – the Tokkonen patent, which is owned by Nokia, and the Gauthey patent, which is owned by Asulab (the R&D division of Swatch Group) – we see that they both deal with either inputting a security code or controlling lock functions. We look at one patent that is never acknowledged by Apple (though it's been cited by IBM, Microsoft and Nokia in their touch-screen patents), U.S. 6,209,104 which actually provides context for the innovations that the examiner thought to be relevant against Apple – patents that include but are far from limited to the patents the examiner actually considered.

These are graphically displayed below:



The purple represents related technology, precedent innovation, that the '104 patent didn't cite. The blue represents subsequent patents that *do* cite the '104 (none of which include Apple). Meanwhile, orange represents subsequent innovation – a.k.a. 969 patents that seem to use this technology but fail to cite it. A sample of this subsequent innovation can be found in Appendix B (in which, funny enough, the '721 patent, along with 33 other Apple patents, show up).

Here at M•CAM, we're wondering if in a post-Jobs world, Apple will actually turn to inventing the process of **claim one**: inventing patents using an infinitely continuous sliding interface where one wears down a patent examiner in the patent office with sufficient mindless drivel such as to; **claim two**: make said examiner in claim one seek a deranged Easter Bunny and do late night talk shows on an iTunes broadcast streaming video; **claim 3** on a mobile device... but, oops, that might infringe on an Oracle patent. Ah shucks! Trick-or-Treat!

For a more detailed examination of Apple's patents, please contact us at patentlyobvious@m-cam.com.

Appendix A

Sample Public Domain technologies that predate the '721 patent:

Document #	Title	Assignee Name	Priority	File	Issue
US 7,258,272	Identification system using face authentication and consumer transaction facility	Oki Electric Industry Co., Ltd.	9-Apr-04	29-Mar-05	21-Aug-07
US 7,200,635	Smart messenger	International Business Machines Corporation	9-Jan-02	9-Jan-02	3-Apr-07
US 7,062,655	Method, system, and storage medium for determining trivial keyboard sequences of proposed passwords	International Business Machines Corporation	23-Jan-02	23-Jan-02	13-Jun-06
US 7,032,171	System and method for selecting and processing information in an electronic document	International Business Machines Corporation	31-Dec-98	22-Oct-99	18-Apr-06
US 6,934,750	Information extraction system, information processing apparatus, information collection apparatus, character string extraction method, and storage medium	International Business Machines Corporation	27-Dec-99	22-Dec-00	23-Aug-05
US 6,888,475	Control system for aircraft seat belt arrangement	DARR JOSHUA SCOTT	10-Jan-02	22-Nov-02	3-May-05
US 6,879,242	Color based lock and key	Israel Alon	15-Mar-02	15-Mar-02	12-Apr-05
US 6,856,327	Apparatus for moving display screen of mobile computer device	Domotion Ltd.	31-Jul-02	31-Jul-02	15-Feb-05
US 6,791,537	Display of ink for hand entered characters	Mobigence, Inc.	6-Jul-01	6-Jul-01	14-Sep-04
US 6,766,042	System to automatically detect eye corneal striae	Memphis Eye & Contact Associates	26-Apr-01	26-Apr-01	20-Jul-04
US 6,754,389	Program classification using object tracking	Koninklijke Philips Electronics N.V.	1-Dec-99	1-Dec-99	22-Jun-04
US 6,683,631	System and method for selecting and deselecting information in an electronic document	International Business Machines Corporation	22-Oct-99	22-Oct-99	27-Jan-04
US 6,540,674	System and method for supervising people with mental disorders	IBM Corporation	29-Dec-00	29-Dec-00	1-Apr-03
US 6,424,357	Voice input system and method of using same	Touch Controls, Inc.	5-Mar-99	5-Mar-99	23-Jul-02
US 6,378,234	Sequential stroke keyboard	Ching-Hsing Luo	9-Apr-99	9-Apr-99	30-Apr-02
US 6,330,023	Video signal processing systems and methods utilizing automated speech analysis	American Telephone and Telegraph Corporation	18-Mar-94	18-Mar-94	11-Dec-01
US 6,130,663	Touchless input method and apparatus	Nathan D. Null	31-Jul-97	31-Jul-97	10-Oct-00
US 6,127,990	Wearable display and methods for controlling same	Vega Vista, Inc.	28-Nov-95	21-Jan-99	3-Oct-00
US 6,107,997	Touch-sensitive keyboard/mouse and computing device using the same	Michael J. Ure	27-Jun-96	27-Jun-96	22-Aug-00
US 6,097,369	Computer mouse glove	Mark L. Wambach	16-Dec-91	2-Feb-95	1-Aug-00

Appendix B

Sample Subsequent Innovation of the '104 patent:

Document #	Title	Assignee Name	Priority	File	Issue
US 8,046,721	Unlocking a device by performing gestures on an unlock image	Apple Inc.	23-Dec-05	2-Jun-09	25-Oct-11
US 8,041,945	Method and apparatus for performing an authentication after cipher operation in a network processor	Intel Corporation	19-Dec-03	27-May-09	18-Oct-11
US 8,040,356	Color management user interface	Microsoft Corporation	30-Mar-07	30-Mar-07	18-Oct-11
US 8,037,148	System and method for authorizing polling selections	CSN-IP, LLC	6-Oct-09	6-Oct-09	11-Oct-11
US 8,032,931	Fabric manager multiple device login	Brocade Communications Systems, Inc.	30-Oct-02	30-Oct-02	4-Oct-11
US 8,031,875	Key distribution in unidirectional channels with applications to RFID	EMC Corporation	9-Aug-07	8-Aug-08	4-Oct-11
US 8,024,775	Sketch-based password authentication	Microsoft Corporation	20-Feb-08	20-Feb-08	20-Sep-11
US 8,020,775	Payment cards and devices with enhanced magnetic emulators	Dynamics Inc.	24-Dec-07	19-Dec-08	20-Sep-11
US 8,020,199	Single sign-on system, method, and access device	5th Fleet, L.L.C.	14-Feb-01	10-Jul-08	13-Sep-11
US 8,016,191	Smartcard transaction system and method	American Express Travel Related Services Company, Inc.	1-Jul-04	9-Aug-10	13-Sep-11
US 8,015,598	Two-factor anti-phishing authentication systems and methods	ARCOT SYSTEMS INC	16-Nov-07	17-Nov-08	6-Sep-11
US 8,015,412	Authentication of an object	SILVERBROOK RES PTY LTD	18-May-04	17-Nov-08	6-Sep-11
US 8,011,577	Payment cards and devices with gift card, global integration, and magnetic stripe reader communication functionality	DYNAMICS INC	24-Dec-07	19-Dec-08	6-Sep-11
US 8,011,014	System and method for password validation based on password's value and manner of entering the password	International Business Machines Corporation	16-Dec-04	20-Oct-05	30-Aug-11
US 8,011,013	Method for securing and controlling USB ports	QuickVault, Inc.	19-Jul-06	16-Jul-07	30-Aug-11
US 8,010,996	Authentication seal for online applications	Yahoo! Inc.	17-Jul-06	25-Jan-07	30-Aug-11
US 8,010,797	Electronic apparatus and recording medium storing password input program	Fujitsu Limited	20-Feb-06	7-Feb-07	30-Aug-11
US 8,010,792	Content transmission apparatus, content reception apparatus and content transmission method	Hitachi, Ltd.	16-Jan-04	17-May-04	30-Aug-11
US 8,006,300	Two-channel challenge-response authentication method in random partial shared secret recognition system	Authernative, Inc.	24-Oct-06	24-Oct-06	23-Aug-11
US 8,006,280	Security system for generating keys from access rules in a decentralized manner and methods therefor	HILDEBRAND HAL S	12-Dec-01	17-Sep-02	23-Aug-11

M·CAM's Patent Glossary

- Aligned Sector:** The business sector in which the product(s) resulting from the patent(s) is currently or intended to be sold.
- Applicant:** 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).
- Application:** 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.
- Art:** 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.
- Assignee:** 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.
- Business Method**
- Patent:** 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.
- Citation:** 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.
- Claim:** 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.
- Concurrent Art:** 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.
- Filing Date:** The date when a properly prepared application reaches the patent office in complete form.
- Innovation Cycle:** A description of the commercialization timeframe for the intellectual property.
- Innovation Space:** 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.
- Issue Date:** 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.
- Non-Aligned**
- Sector:** 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.
- Pod:** 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).
- Prior Art:** 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".
- Subsequent Art:** 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 Commons⁷ (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.

⁷ <http://www.globalinnovationcommons.org/>