Preventive IP: Notes on the State of Architectural Intellectual Property

Architecture is probably the one creative field in which the flow of knowledge is least regulated. For instance, compare it to music or cinema in which copyright laws dictate the maximum length of the fragments that can be freely use by others. Think of the legal implications that terms such as plagiarism, quotation, or paraphrasing have in literature. Remember how intellectual property (IP) rights render illegal any transformation of a work of art not sanctioned by its author. Albeit architecture, since 1990,[1] has enjoyed a legal status similar to these other fields, none of these principles seem to apply. In fact, IP regulations remain mostly underdeveloped and rarely enforced.

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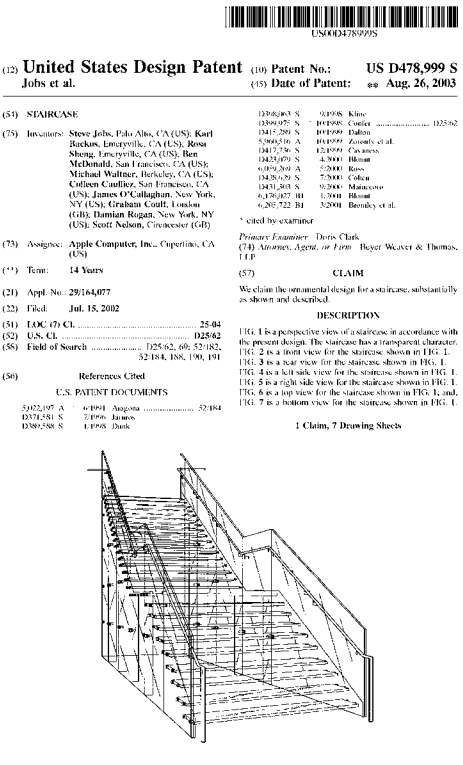
A BRIEF HISTORY OF STEALING

A probable cause is the role that appropriation has played in architectural history. For centuries, under the Beaux Arts model, copying, studying, and producing architecture were almost synonymous with each other. The advent of modernity rather intensified this fact; mechanical reproduction not only increased the accuracy of the copies and the speed of their circulation, it constructed modern architecture. The neo-avant-gardes of the 1970s shamelessly misused works of the 1920s. Postmodern historicists added irony with the unrestrained use of works of the past. The last fifteen years of architectural way-too-similar-shapes-on-steroids in the Middle East and South East Asia are not an exception; Sharing and borrowing still articulate architectural production.

CALATRAVA, JOBS, ET AL.

Yet, recent legal precedents announce a shift. In 2009 the architect Santiago Calatrava took legal action against the Municipality of Bilbao after the city built a pedestrian platform – designed by the architect Arata Isozaki – that connected to bridge Zubi-Zuri, designed by Calatrava, and required the removal of part of its railing. The verdict did not order the demolition of the pedestrian platform but recognized the moral rights of the architect over unauthorized transformations of his work and granted him a 30,000 euro compensation.[2] In 2003, Apple patented the glass stair of their flagship store in Soho, New York.[3] The patent granted Apple the intellectual ownership of the technical details of the design for fourteen years. In 2013 the firm was able to patent an entire building – the cylindrical glass pavilion that serves as entrance to their Shanghai store – claiming rights over its curved glass panels.[4]



US00D478999S

(12) **United States Design Patent** (10) **Patent No.: US D478,999 S**
Jobs et al. (45) **Date of Patent: ** Aug. 26, 2003**

(54) **STAIRCASE**

(75) Inventors: **Steve Jobs**, Palo Alto, CA (US); **Karl Backus**, Emeryville, CA (US); **Rosa Sheng**, Emeryville, CA (US); **Ben McDonald**, San Francisco, CA (US); **Michael Waltner**, Berkeley, CA (US); **Cotlien Cunllier**, San Francisco, CA (US); **James O'Callaghan**, New York, NY (US); **Graham Coult**, London (GB); **Damian Rogan**, New York, NY (US); **Scott Nelson**, Cirencester (GB)

(73) Assignee: **Apple Computer, Inc.**, Cupertino, CA (US)

(**) Term: **14 Years**

(21) Appl. No.: **29/164,077**

(22) Filed: **Jul. 15, 2002**

(51) **LOC (7) Cl.** **25-04**
(52) **U.S. Cl.** **D25/62**
(58) **Field of Search** D25/62, 60; 52/182, 52/184, 188, 190, 191

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,022,197 A	*	6/1991	Augusta	52/184
D371,581 S		7/1996	James	
D389,588 S		1/1998	Dank	
5,896,963 S		9/1998	Kline	
D399,975 S	*	10/1998	Confer	D25/62
D415,289 S		10/1999	Dalton	
5,960,516 A		10/1999	Zozaoki et al.	
D417,736 S		12/1999	Cavaness	
D423,079 S		4/2000	Blount	
6,092,269 A		7/2000	Ross	
D430,628 S		7/2000	Colten	
D431,305 S		9/2000	Manicewo	
6,170,027 B1		1/2001	Blount	
6,205,722 B1		3/2001	Bromley et al.	

* cited by examiner

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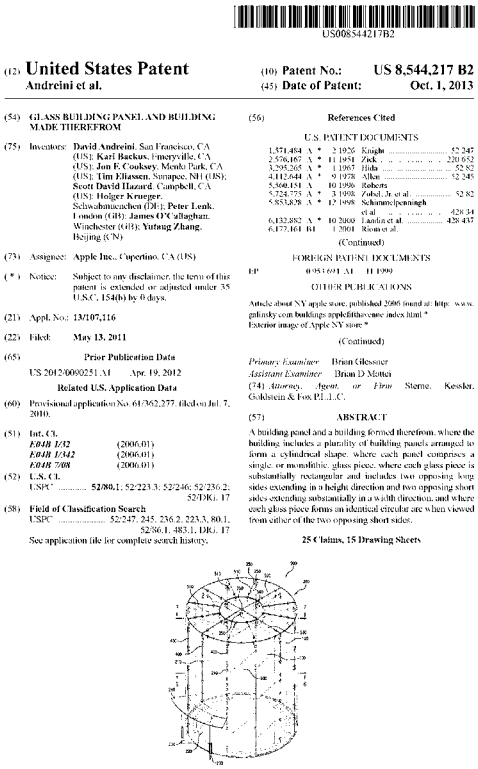
(57) **CLAIM**

We claim the ornamental design for a staircase, substantially as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of a staircase in accordance with the present design. The staircase has a transparent character.
FIG. 2 is a front view for the staircase shown in FIG. 1.
FIG. 3 is a rear view for the staircase shown in FIG. 1.
FIG. 4 is a left side view for the staircase shown in FIG. 1.
FIG. 5 is a right side view for the staircase shown in FIG. 1.
FIG. 6 is a top view for the staircase shown in FIG. 1; and,
FIG. 7 is a bottom view for the staircase shown in FIG. 1.

1 Claim, 7 Drawing Sheets



US008544217B2

(12) **United States Patent** (10) **Patent No.: US 8,544,217 B2**
Andreini et al. (45) **Date of Patent: Oct. 1, 2013**

(54) **GLASS BUILDING PANEL AND BUILDING MADE THEREFROM**

(75) Inventors: **David Andreini**, San Francisco, CA (US); **Karl Backus**, Emeryville, CA (US); **Jon F. Couksey**, Menlo Park, CA (US); **Tim Eliassen**, Sunapee, NH (US); **Scott David Hazard**, Campbell, CA (US); **Holger Krueger**, Schwabmuenchen (DE); **Peter Lenk**, London (GB); **James O'Callaghan**, Winchester (GB); **Yutong Zhang**, Beijing (CN)

(73) Assignee: **Apple Inc.**, Cupertino, CA (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **13/107,116**

(22) Filed: **May 13, 2011**

(65) **Prior Publication Data**

US 2012/0090251 A1 Apr. 19, 2012

Related U.S. Application Data

(60) Provisional application No. 61/362,277, filed on Jul. 7, 2010.

(51) **Int. Cl.**
E04B 1/32 (2006.01)
E04B 1/342 (2006.01)
E04B 7/00 (2006.01)

(52) **U.S. Cl.**
USPC **52/80.1**; 52/223.3; 52/246; 52/236.2; 52/DIG. 17

(58) **Field of Classification Search**
USPC ..... 52/247, 245, 236.2, 223.3, 80.1, 52/86.1, 483.1; DIG. 17
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

1,571,454 A	*	2/1926	Knight	52/247
2,576,167 A	*	11/1951	Zick	220/652
3,295,265 A	*	1/1967	Hida	52/82
4,112,644 A	*	9/1978	Allen	52/245
5,500,151 A		10/1996	Roberts	
5,724,775 A	*	3/1998	Zobel, Jr. et al.	52/82
5,853,828 A	*	12/1998	Schumm[illegible]enough et al.	428/34
6,132,882 A	*	10/2000	Landis et al.	428/437
6,177,161 B1		1/2001	Rhoades et al.	

(Continued)

FOREIGN PATENT DOCUMENTS

EP 0 951 601 A1 11/1999

OTHER PUBLICATIONS

Article about NY apple store, published 2006 found at: http://www.gizmodo.com/buildings/apple/fifth-avenue/index.html * Exterior image of Apple NY store *

(Continued)

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(57) **ABSTRACT**

A building panel and a building formed therefrom, where the building includes a plurality of building panels arranged to form a cylindrical shape, where each panel comprises a single, or monolithic, glass piece, where each glass piece is substantially rectangular and includes two opposing long sides extending in a height direction and two opposing short sides extending substantially in a width direction, and where each glass piece forms an identical circular arc when viewed from either of the two opposing short sides.

25 Claims, 15 Drawing Sheets

1, 2

UNFORESEEN CONSEQUENCES

The legal implications of these cases have yet to be explored. The strict enforcement of the moral rights – currently granted by architectural IP law – will restrict the users' ability to introduce changes in any work of architecture without the architect's permission, turning the current relation between architects and users upside-down. Changing a fixture, re-painting a wall or nailing a spike to hang a frame will be illegal. Similarly, implementing the patent regime as it operates in the realm of technology will reconfigure the way architects operate. It will exponentially increase the costs associated with architectural production in a field in which innovation rarely produces immediate economic value. But more importantly, it will illegalize the culture of appropriating detail that has fuelled four hundred years of architectural practice.

PARADIGM SHIFT

These legal precedents also illustrate a broader ongoing change. The enforcement of IP rights in the realms of music, cinema or technology has proven tremendously profitable, increasing the pressure over other untapped IP capitals, which include architecture's unregulated culture of sharing. The topic may not enjoy much popularity in architectural scholarship, but it is gaining momentum outside of the field and is an emerging trend in IP journals. While architects relinquish entering the debate, the development of architectural IP falls in the hands of legal experts not necessarily acquainted with architecture's specificity.

Figure 1: Jobs et al. US Patent No. D478,999 (August 26, 2003) Washington, DC: U.S. Patent and Trademark Office.

Figure 2: Andreini, et al. US Patent No. 8,544,217 (October 1, 2013) Washington, DC: U.S. Patent and Trademark Office.

STUDY CASES

Three recent attempts to challenge the disciplinary silence are the exception, addressing architectural IP from within the field of architecture: Ana Miljacki's exhibition Fair Use: An Architectural Timeline,[5] Pier Vittorio Aureli's essay 'The

Common and the Production of Architecture: Early Hypotheses'[6] and the Domus op-ed 'Open Source Architecture Project (OSArc)'.[7] All three propose ways to protect the collective nature of architecture against excesses of copyright regulation. All three position disciplinary culture in relation to broader IP debates such as creative commons, fair use, and shared authorship. And all three implicitly recognize architects have the opportunity – and the responsibility – to enter the discussion over which model of IP should be applied in their field. But more importantly, they use IP to outline three radically distinct definitions of architectural knowledge, demonstrating how this debate has deep implications for the core of the discipline.

ANA MILJACKI: ARCHITECTURE IN THE MARKETPLACE OF IDEAS

Although the statement never explicitly clams it, Ana Miljacki's exhibition Fair Use: An Architectural Timeline infers that architecture knowledge is in the initial stages of the regulatory process. The three documents on display – a timeline, an archive of legal IP cases and a collection of models – reinforce this hypothesis. They illustrate how architecture is following closely in the footsteps of other fields. The timeline incorporates the recent history of architectural IP with a chronology of technologies of reproduction. The archive collects legal cases involving copyright infringements in design practices. A collection of forty 3D printed models identifies instances of architectural knowledge that, according to the curator, deserve to fall under fair use protection – an exception to the exclusive right granted by copyright law to the author of a creative work. The latter document holds the largest implications for architectural IP. It entails that some instances of architectural knowledge have been so profusely used that nobody can claim authorship rights over them anymore. They belong to everybody. Architects have the responsibility to protect them to avoid the privatization of the core of the discipline. This last line of defense against the excesses of copyright also clarifies Miljacki's understanding of disciplinary knowledge as a commodity. If there are cases of architectural culture that fall under fair use, there are others that don't. Rather, they can be copyrighted and privately owned. The need for a protective category like fair use proves that architectural knowledge already has a place in the global market of cultural production in which it can be evaluated against other forms of disciplinary knowledge – according to its economic value.

AURELI: THE AUTONOMY OF THE COMMON

In contrast, for Aureli, architectural knowledge – what he calls the common – is both pre-individual and not universal. It precedes individual instantiations and "exceeds its technical and commercial determination."[8] Also, rather than an abstraction of uniform characteristics from different individual instances, it is a collective force that exists prior to singular manifestations. Aureli's definition has two implications in relation to IP. First, it differentiates between architectural knowledge and individual architects, negating the possibility of personal IP ownership. Similar to language, architectural knowledge has no authors because its existence precedes individual authorship. It is a shared culture. Second, disciplinary culture does not belong in the space that IP regulation provides for collective knowledge. Choosing the term the common instead of the commons – the nomenclature associated with the Creative Commons project – Aureli introduces architectural autonomy in the discussion of IP. If Creative Commons' goal is an attempt to construct a legal space – parallel to copyright – for the free circulation of knowledge, the nature of the project is its ultimate weakness. While Creative

Commons' licenses construct a legal frame for not-for-profit sharing, they also have to compete in the market with regular copyright licenses. The missing 's' announces that architectural knowledge differs from the knowledge that can be licensed under Creative Commons. It does not belong to the market place of ideas. Its disciplinary autonomy is not a disengagement from the world, but rather a political refusal to accept the prevalent models of production and consumption of culture.[9]

OSARC: AUTHORLESSNESS AND ITS DISCONTENTS

OSArc steers the discussion on the status of architectural knowledge to focus on its production. New sharing technologies have transformed architectural and design practices. Crowdsourcing, peer-to-peer networks, and social media have radical implications for production processes. The OSArc manifesto, published as an op-ed in Domus, evidences a technological optimism.[10] It was penned using a Wikipedia page open to a limited amount of authors.[11] Yet the focus on the process obscures the evaluation of its transformative qualities. The text opens with a precise description of the protocol used to write it, but is unclear about how the process improved its contents. The mix of technologies and procedures seems to be the main criteria for evaluation. And the assessment lacks disciplinary specificity; music, cinema, literature, and visual arts have successfully implemented similar means of production. This apparent flaw is the larger claim implicit in the OSArc proposal. It suggests that the debate on architectural IP is part of a broader conversation, which bridges over multiple disciplines and it needs to be addressed as such. Creative fields share a culture of technologies and procedures that made disciplinary differentiation almost impossible. Architecture and its knowledge are part of it and therefore do not exist in isolation.

PATENT VERSUS COPYRIGHT

All three proposals recognize the opportunity to learn from the excess of copyright regulations in other fields. They also foresee the architects' responsibility when the fragile nature of architectural knowledge is at stake. And they imply possible developments for architectural IP, alongside changes in disciplinary culture. Yet they fail to recognize a structural flaw in IP international regulation, which places architecture under copyright law. Copyright is the law of authorship and ideas, while patent is the law of invention. The former focuses on aesthetic and cultural value and it seems to be the preferred model in the previous examples. The latter recognizes a solution to a specific technological problem – it may be a product or a process – and, in architecture, has been typically used to acknowledge constructive solutions. Yet patent categories have expanded to include new forms of invention such as Business Methods, Treatment of Human Beings, Analogous Uses, Combinations, Collocations, Kits, or Packages, among others.[12] They seem ready to welcome other types of architectural inventions. Current legal debates tend to import IP models from visual arts, a mistranslation that favors the assessment of aesthetic and cultural values. Leveling the legal discussion on the nature of architectural knowledge requires acknowledging the hybrid nature of the field – between fine and applied art. In Miljacki, Aureli and OSArc's proposals architecture remains in the realm of copyright. Notions like fair use, commons, and distributed authorship are categories that belong to the world of authorship and ideas. A reformulation of the architectural IP conundrum cannot miss the other half. Architects design devices, methods, compositions, or processes that achieve completely unique functions or results (i.e. inventions). Categories that qualify its value are missing.

ENDNOTES

1. Congress passed the Architectural Works Copyright Protection Act (AWCPA), which amended the Copyright Act to specifically include 'architectural works among the list of protected works in 17 U.S.C. § 102 H.R. Rep. No. 735, at 6936 (1990).
2. Europa Press, 'Bilbao, condenado a indemnizar a Calatrava por "alterar su obra"' (11 MAR 2009 - 12:44 CET) in El Pais, retrieved October 21, 2013, from http://cultura.elpais.com/cultura/2009/03/11/actualidad/1236726003_850215.html
3. Jobs et al. US Patent No. D478,999 (August 26, 2003) Washington, DC: U.S. Patent and Trademark Office.
4. Andreini, et al. US Patent No. 8,544,217 (October 1, 2013) Washington, DC: U.S. Patent and Trademark Office.
5. Ana Miljacki, Fair Use: An Architectural Timeline Exhibition at MIT Architecture, February 23rd 2013.
6. Pier Vittorio Aureli, 'The Common and the Production of Architecture: Early Hypotheses', in David Chipperfield, Kieran Long & Shumi Bose (editors,) Common Ground: A Critical Reader, (Venice: La Biennale di Venezia, 2012).
7. Paola Antonelli, Adam Bly, Lucas Dietrich, Joseph Grima, Dan Hill, John Habraken, Alex Haw, John Maeda, Nicholas Negroponte, Hans Ulrich Obrist, Carlo Ratti, Casey Reas, Marco Santambrogio, Mark Shepard, Chiara Somajni and Bruce Sterling (contributors), 'Open Source Architecture (OSArc)' op-ed in Domus 948 June 2011.
8. Pier Vittorio Aureli, 'The Common and the Production of Architecture: Early Hypotheses'.
9. This position is the logical extension to the intellectual production of the proposal of an architecture that can resist the logic of capital behind the processes of urbanization developed by Pier Vittorio Aureli in The Possibility of an Absolute Architecture (Cambridge, MA: MIT Press, 2011).
10. Ibid.
11. Opensource Architecture. (2013, April 15). In Wikipedia, The Free Encyclopedia. Retrieved Sept. 18, 2013, from http://en.wikipedia.org/w/index.php?title=Opensource_Architecture&oldid=550529455.
12. 'Patent Manual of Practice & Procedure '(2013, June 3) Retrieved 06:00, Sept. 18, 2013, from http://www.ipaustralia.gov.au/pdfs/patentsmanual/WebHelp/Patent_Examiners_Manual.htm#national/patentable/2.9.2.5_discoveries_ideas_scientific_theories_schemes_and_plans.htm.

NEW FORMS OF ARCHITECTURAL PATENTING?

Janus-like, the goal of this question is twofold. On the one hand it attempts to evaluate the contested nature of architectural knowledge displacing its validation outside the field. Patent applications are examined against globally agreed notions of innovation. A successful architectural patent will demonstrate that autonomous architectural culture has value per se, and that it can be evaluated in a broader system of knowledge. On the other hand the question attempts to trigger an internal discussion on the ways in which architectural knowledge circulates, before external regulatory agencies end any possibility for alternatives. Aureli, Miljacki and OSArc's efforts need to be continued to ensure that architects retain control over the future of architectural knowledge.