

Clean Tech Intellectual Property: Eco-marks, Green Patents, and Green Innovation,
by Eric L. Lane.
New York: Oxford University Press, Inc., 2011,
260 pp., \$185.00, Paperback.

James J. Kozuch*

In *Clean Tech Intellectual Property: Eco-marks, Green Patents, and Green Innovation*, Eric Lane takes the position that clean tech intellectual property (IP), or green IP, differs from IP in other industries because green IP is characterized by several unique features of clean tech. These, according to Lane, include a diversity of technologies, the fact that clean tech borrows from and builds on prior periods of green technology R&D and technologies from other industries such as computers and semiconductors, and clean tech's promise of solutions to mitigate climate change and benefit the environment. Lane proceeds, in an organized and well written manner, to demonstrate how "green IP issues pose unique challenges and raise profound legal and moral questions about the nature of innovation, the best way to facilitate transfer and deployment of clean technologies, and how to protect green consumers." (Page 3).

It is no surprise that Eric Lane was the first to write a comprehensive review of IP and clean technology, which should be of interest to clean tech business owners, IP attorneys, students and teachers, as well as policy makers and professionals in the energy industry. An IP lawyer and registered U.S. patent attorney, Lane is a founding member of his law firm's Climate Change, Renewable Energy & Sustainable Technology (CREST) group and also the founder and author of Green Patent Blog – www.greenpatentblog.com – an award winning website dedicated to the discussion and analysis of IP issues in clean technology and renewable energy. Portions of the book are adapted from some of his previously published articles.

In Chapter 1, "Clean Tech IP is for Real," Lane discusses several definitions of clean technology, or "clean tech," making the point that clean tech includes a diverse range of products, services, and processes, from solar power systems to hybrid electric vehicles (HEVs), but is unified by a purpose – "to ben-

efit the environment and mitigate climate change by generating energy through renewable sources, boosting energy efficiency, and reducing greenhouse gas emissions." (Page 2).

The book is divided into four sections. Section 1 (Chapters 2–4) focuses on green patent prosecution, portfolios, and licensing. After discussing strategies for drafting and prosecuting clean tech patent applications in Chapter 2, Lane provides several case studies in Chapter 3 showing how some companies have developed clean tech patent portfolios directed to key innovations that support their business strategies, which differentiate their companies from competitors. The focus in Chapter 4 is on clean technology transfer and licensing of IP rights to create value. As in Chapter 3, Lane again presents case studies to illustrate these IP licensing strategies.

Lane also uses illustrations in Chapters 2 and 3 to help explain the technologies involved. Although both chapters are well written (as is the entire book), these two chapters may not appeal to readers who are not patent attorneys or engineers due to their technical and specific nature.

In Chapter 4, Strategic IP licensing of clean technology through different IP licensing business models is demonstrated through various examples of how licensing of IP rights provides a valuable and versatile tool for clean tech companies. Extensive footnotes are used throughout Chapter 4, as well as the rest of the book. The informative footnotes provide additional useful information summarized from the extensive research by Lane.

Section 2, "Clean Tech in Court," includes Chapters 5 and 6. Using examples from actual cases, Lane shows in Chapter 5 how clean tech companies have used green patents to protect their market positions through litigation involving various green technologies – wind turbines, light-emitting diodes (LEDs), gas-electric hybrid vehicles, and biofuels.

Chapter 6 discusses several patent infringement actions by nonpracticing patentees (NPPs) – patent holders who do not commercialize their patented technology but instead generate revenue through licensing. Through a well thought out analysis, Lane shows how the U.S. Supreme Court's decision in *eBay, Inc. v. MercExchange, LLC*, 547 U.S. 388, 391-92 (2006) and the *Paice LLC v. Toyota Motor Corp.*, 504 F.3d 1293, 1296-97 (Fed. Cir. 2007) decision of the U.S. Court of Appeals for the Federal Circuit have impacted clean tech NPPs. According to Lane, "the course correction in the law of patent injunctions

* James J. Kozuch, J.D., P.E., MBA, Caesar, Rivise, Bernstein, Cohen & Pokotilow, Ltd., Philadelphia, Pennsylvania.

brought about by *eBay v. MercExchange* and the endorsement and operation of court-awarded ongoing royalty payments in *Paice v. Toyota* demonstrate an important shift in patent law that is tempering the impact of clean tech NPPs.” (Page 118). Lane observes that some clean tech NPPs have now turned to the U.S. International Trade Commission (ITC) where the *eBay* ruling does not apply and the remedy of an importation ban is available. Although Lane’s analysis is correct and well presented, this is not unique to clean tech NPPs, and arguably applies to NPPs in other industries as well.

Section 3 turns from patents to trademarks and discusses green branding, green marketing, greenwashing, and related litigations in Chapters 7, 8, and 9. Chapter 7 discusses “Eco-marks” – trademarks, service marks, and certification marks intended to communicate environmentally friendly characteristics of products, services, or business practices. Again using case studies to make his point, Lane sets forth considerations for business owners seeking to protect their green brands and discusses alternative strategies in view of U.S. Trademark Law.

Chapter 8 focuses on greenwashing and the efforts made by the Federal Trade Commission (FTC) and others to combat greenwashers. Greenwashing “means making false misleading claims regarding purportedly environmentally friendly products, services, or practices.” (Page 168). Lane explains that greenwashing often involves products for which energy efficiency or fuel consumption are big selling points, such as home appliances, laptop batteries, automobiles, and tires. Greenwashing also occurs in connection with products which consumers may fear contain dangerous chemicals or toxins, such as household cleaning products, paint or personal care items.

Chapter 9 discusses Eco-mark litigation with particular attention to how consumers are affected by the outcomes of such litigation.

Although the inclusion of Section 3 (trademark issues) provides for more complete coverage of the subject matter from the IP viewpoint, this section is less relevant than the other sections to the thesis set forth by Lane. If the intent was to be complete, then perhaps trade secret and copyright issues should have been discussed as well.

Section 4 discusses recent green patent policies and initiatives in Chapter 10 and the international debate over IP rights and policies to facilitate the transfer of clean technologies in Chapter 11. The green

patent programs discussed in Chapter 10 involve sharing or pooling of clean tech patents, organizing and providing access to green patent data, and programs for fast-tracking of green patent applications.

Lane’s comparison of the fast-tracking programs offered by the national patent offices in the United States, United Kingdom, and Korea to reduce patent application pendency and speed the issuance of green patents shows the options available to patent attorneys and their clients. He notes that: “The fast examination results and rapid turnaround from application filing to patent grant – nine months in the United Kingdom and only one month in Korea – can provide the clean tech patentee with a very quick indication of patentability.” (Page 224). And later states: “The quick indications of patentability and exclusivity in particular inventions the fast-tracking programs provide could help clean tech startups secure capital investment and may reduce the time to market for some clean technologies.” (Page 226).

In Chapter 11, Lane provides a very good summary of the history of the international debate over green patent policy – whether IP rights foster innovation and promote implementation of clean technologies or stand as a barrier to their development and deployment. He discusses the debate in the context of the 2009 Copenhagen negotiations to draft the next global climate change treaty to replace the Kyoto Protocol, which expires in 2012. Using nine examples of international green tech transfer deals which were not hindered by IP rights, Lane demonstrates how clean tech transfer is happening irrespective of, and in some cases, because of, IP rights.

One of the book’s major strengths is Lane’s use of case studies and concrete evidence to make convincing arguments in support of his thesis. He was able to do that because of his extensive knowledge of both IP law and clean technologies due to his significant research, scholarly writing, and blogging on those topics.

The book could have benefited from a concluding chapter and a preface. For completeness, it perhaps also should have included a discussion of trade secrets and copyrights as those forms of IP law apply to clean tech.

Overall, Lane has achieved his purpose of providing a comprehensive view of clean technology and IP law, demonstrating how IP law is influencing the growth of clean tech and how green business models and strategies are affecting the practice of IP law. Readers will appreciate his insights relating

to prosecuting green patent applications, developing green patent portfolios, licensing green technologies, and prosecuting green trademark applications while building green brands. Anyone involved with or interested in IP law and/or clean technology will enjoy Lane's book and find it to be a valuable addition to their library.

La regulation des nanotechnologies.

Clair-obscur normatif,

by Stéphanie Lacour.

Brussels: Larcier, 2010, 279 pp.,

€55.00, Paperback.

*François Thoreau**

A '*clair-obscur*' normativity. In French, Historians of art use it when they refer to an abrupt association of zones made out of very dark shadows together with dazzling lights, like da Caravaggio used to paint. It applies successfully to nanotechnologies, which points out to this set of technologies that are being developed at a billionth of a meter. At this scale, matter shows new and unexpected properties, which could potentially lead the way to numerous applications but how do we regulate it? Lacour's edited volume should be of interest to lawyers and regulators interested in this subject. It borrows this formula of the *clair-obscur* to characterize a fluctuating normative environment which surrounds nanotechnologies' development.

The book is divided in three parts. The first part addresses the shifts in the regulatory regime of nanotechnologies, reflecting on the social production of norms, on the underlying philosophies as well as on the invisible, yet tangible, shaping of nanotechnologies' development. The second part goes more concrete and addresses the ways through which these norms are elaborated, debated and even disputed, in modern societies especially through public debates and public participation. Lastly, the third part brings into light actual regulation of nanotechnologies, in the most legal meaning of what a "norm" is. It offers state-of-the-art review of the current state of nanotechnologies' regulation.

Among others, Hervé-Fournereau show the powerful undertaking of nanotechnologies by public authorities, who actively trigger research & development as well as the release of nano-enabled applications on the market. Consequently, these are imposing themselves at an impressive pace. Just take, as an example, the inventory of nano-enabled consumer products from the *Project on Emerging Nanotechnologies* (PEN), which was recently updated to reach an overall total of more than 1,300 entries. One understands it is therefore needed, let alone urgent, to equip our societies with an accurate regulatory regime which allows regulators to understand and frame all these recent evolutions.

The collective volume comes up with two broad challenges to address. The first one is about "nanotechnologies" as an object which covers a vast array of different realities and technologies. In such a context, numerous questions arise, for instance as for the opportunity of a dedicated regulation (as opposed to adaptations to the current legal frameworks) or how to label or define what exactly are nanotechnologies, nanomaterials, and the like. In her chapter, Desmoulin-Canselier addresses these terminological as well as definitional issues. The stakes are potentially far reaching, in most industrial and commercial sectors as well as in almost every field of law (p. 19). Such diversity is not likely to be fully grasped through the traditional categories of legal thinking.

The second challenge builds on the first: complex socio-technical objects like nanotechnologies are re-defining the very meaning of the legal rule. Law is put under pressure by such developments. The whole book is concerned with the implications of potential major shifts in law making. The meaning of law, the multiplicity of ways it is being constantly redefined and expressed are paid careful scrutiny by most of the authors in the book. Therefore, through a subtle inversion the volume sometimes deals with philosophy of law rather than legal issues of new and emerging technologies. It is here that a "norm" as something broader than its traditional legal meaning becomes relevant. Indeed, this extended notion of a norm pervades the book which is fortunate in the case of nanotechnologies, as the legal rules are being shaped through, and thus appear as a result of, constant interactions among a broad range of social actors and unwritten conventions.

Such a reflection is much welcome. In his chapter, Laurent demonstrates how technical and social categories are being "co-produced", in the case of

* PhD Candidate, Fonds de la Recherche Scientifique (F.R.S.-FNRS) Spiral, University of Liège.