5. Designing disclosure: disclosure of cultural and genetic resource utilisation in design protection regimes*

Margo A. Bagley**

Intellectual colonialism is the modern manifest destiny.

Casey Brown, Ho-Chunk Nation of Wisconsin¹

I. INTRODUCTION

The idea of industrial design, making useful articles aesthetically pleasing, is ancient in its origins,² and has been recognised as a protectable category of industrial property since the signing of the Paris Convention

^{*} All online sources were last accessed on 27 December 2018.

^{**} This chapter is a derivative of, and incorporates large portions of, Margo A Bagley, Ctr For Int'l Governance Innovation, 'Illegal Designs? Enhancing Cultural and Genetic Resource Protection Through Design Law' (2017) and was prepared with generous support from the Centre for International Governance Innovation. It also borrows from Margo A Bagley, 'Ask Me No Questions: The Struggle for Disclosure of Cultural and Genetic Resource Utilization in Design Applications' (2018) 20 Vand J Ent & Tech L 975. Special thanks to Shawn Gannon, Kurt Zhao and Chen Wang for excellent research assistance. It also benefitted from input from participants at the International Intellectual Property Scholars Workshop at New York University School of Law and the ATRIP Conference at Victoria University of Wellington, New Zealand.

¹ Quoted in D J Pangborn, 'A Navajo Artist Breaks Down His Tribe's Urban Outfitters Lawsuit' (August 2016) Vice: Creators https://creators.vice.com/en_us/article/8qvjpb/navajo-artist-urban-outfitters-lawsuit.

² See for example Graeme B Dinwoodie and Mark D Janis, *Trade Dress and Design Law* (Aspen 2010) 3, 5; Jason J Du Mont and Mark D Janis, 'The Origins of American Design Patent Protection' (2013) 88 Ind L J 837, 839–40; Dan Hunter and Suzannah Wood, 'The Laws of Design in the Age of Mechanical Reproduction' (2016) 37 Adelaide L Rev 403, 407.

in the mid-1800s.³ In fact, the first trade agreement between France and the UK, signed in 1860, provided protection for 'rights of property . . . in patterns of every description'.⁴ However, for most of the twentieth century, design protection was something of a backwater compared to utility patents, trade marks, and copyrights,⁵ with many companies perceiving little value in this form of intellectual property (IP) coverage.⁶ That has changed significantly in recent years, with design application filings increasing year after year in many jurisdictions around the world.⁷ Global filings of design applications numbered approximately 872,600 in 2015 as compared to 406,500 in 2005 and 187,200 in 1995.⁸ Figure 5.1

³ See Paris Convention for the Protection of Industrial Property (signed on 20 March 1883, revised on 14 July 1967, last amended 28 September 1979) 21 UST 1583, 828 UNTS 305. (Paris Convention).

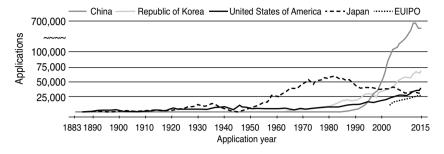
⁴ Treaty of Commerce between Great Britain and France (signed on 23 January 1860) art XII, British and Foreign State Papers Volume 50 (1860) 23, cited in Natalia Kapyrina, 'Design Rights in EU PTAs – Where Does Such Internationalization Lead?' (2019) 53 J World Trade 4.

⁵ Some elements of a design, such as surface ornamentation, can be protected by copyright or, if the design serves as a source indicator, by trade mark. See WIPO Secretariat, 'Possible Areas of Convergence in Industrial Design Law and Practice' (2009) SCT/21/4, ss 101, 104 ('In the majority of jurisdictions, a given object can be protected at the same time by design law and by trademark law Industrial designs as ornamental and aesthetic creations can in theory be protected, not only by design *sui generis* law, but also by copyright').

⁶ See Sarah Burstein, 'Costly Designs' (2015) 77 Ohio St L J 107, 109–10 (noting 'design patents were decidedly out of vogue for most of the twentieth century'); Peter Lee and Madhavi Sunder, 'Design Patents: Law Without Design' (2013) 17 Stan Tech L Rev 277, 278 ('While scholars, policymakers, and the bar have devoted substantial attention to copyrights, trademarks, and utility patents, design patents have largely languished on the periphery of intellectual property').

⁷ See for example Robert J Walters, 'Is Design Patent Litigation Headed for a Turnaround?' (2013) BNA Pat Trademark & Copyright J, https://www.bloom berglaw.com/product/law> (search by author and title) (discussing the impact of the *Apple v Samsung* litigation on increasing interest in design patent protection); Margaret M Welsh and Steve M Gruskin, 'Patent Enforcement Update – Design Patents' (2014) Intell Prop Today http://www.oppedahl.com/images/sughrue.pdf ('With these recent developments, design patents are becoming a more useful, and in some cases a more threatening, tool in companies' patent portfolios. Companies are recognizing the value of a design patent and filing more applications than in the past').

⁸ World Intellectual Property Organisation (WIPO), 'World Intellectual Property Indicators' (2016) 115, 118, www.wipo.int/edocs/pubdocs/en/wipo_pub_941_2016.pdf ('In 2015, the classes that accounted for the largest shares of the world total were furnishings (9.4%), articles of clothing (8.3%) and packages and containers (7%)'); see WIPO, 'WIPO IP Statistics Data Center', https://www3.wipo.int/ipstats/editIpsSearchForm.htm?tab=industrial (select the 'Industrial design' tab



Source: World Intellectual Property Organisation (WIPO), 'World Intellectual Property Indicators' (2016) 115, 121.

Figure 5.1 Top five industrial design offices' application trends

depicts the generally steady growth in applications received by the top five industrial design offices.

The market importance of design protection is generating attention as well. A 2013 study by the European Union Intellectual Property Office (EUIPO) and the European Patent Office estimated that 12.2 per cent of EU employment and 12.8 per cent of EU gross domestic product was attributable to design-intensive industries. The acquisition and enforcement of design rights by smartphone and tablet makers Apple and Samsung illustrate both the increasing interest in design protection and the value such protection can provide. In 2001 Apple obtained ten US design patents and Samsung obtained eight. However, by 2011, those numbers had increased to 123 and 333, respectively. Moreover, Apple's 2012 jury award against Samsung of more than \$1 billion (later reduced on appeal), most of which apparently resulted from design patents, may have spurred

and further select '1 – Total design applications (direct and via the Hague system)' under indicator, 'Total count by filing office' under report type, 1995 to 2015 under year range, and 'World' under select office).

⁹ European Commission, Industrial Design Protection https://ec.europa.eu/growth/industry/intellectual-property/industrial-design/protection_en. The euipo was formerly the Office for Harmonization in the Internal Market. See Council Regulation (EC) 2015/2424 [2015] OJ L 341/21, art 1(7).

¹⁰ Jeffrey Stone and Brett Klein, 'Design Patent Flexes Muscles' (December 2012) DuetsBlog <www.duetsblog.com/2012/12/articles/idea-protection/design-patent-flexes-muscles/>.

¹¹ Ibid ('The verdict resulted in \$1.05 billion owed to Apple by Samsung, primarily due to design patent infringement'); see also *Apple Inc v Samsung Elecs* (2012) 678 F3d 1314 (Fed Cir); Christopher Buccafusco and Jeanne Curtis, 'The Design Patent Bar: An Occupational Licensing Failure' (2018) https://ssrn.com/

Samsung to file for an increased number of design patents. In 2015 Apple obtained 189 US design patents and Samsung obtained 1,428.¹² Apple's win was a wake-up call that resonated beyond Samsung, as it demonstrated to many observers and producers the potential value of design protection.

An area of increasing interest in the design space involves the exploitation of ethnically and culturally distinctive works. The use of Native American, Aboriginal, Pacific Islander, and pan-African imagery is not new, but its value and allure, including as sources of designer inspiration, appear timeless.¹³ In addition, the use of natural materials such as those employed by Indigenous peoples in handicrafts or as sacred objects also remains high.¹⁴ Figure 5.2 showing an early 20th-century Romanian coat

abstract=3245319> ('Design patents aren't only expanding in raw numbers. They also seem to be increasingly valuable to firms' IP portfolios. The recent smartphone litigation between Apple and Samsung resulted in enormous infringement verdicts that were largely based on Apple's design patents. Accordingly, we expect design patents' legal and economic significance to continue to grow').

¹² Larry Cady, 'IFI Has Not Forgotten About Design Patents: The US Design Top 50' IFI Claims Pat Servs (September 2016) https://www.ificlaims.com/news/view/blog-posts/ifi-has-not-forgotten.htm>.

¹³ See WIPO, 'Gnaritas Nullius (No Ones' Knowledge): The Public Domain and Colonization of Traditional Knowledge' (2010) WIPO/GRTKF/IC/17/ INF/5(A), 3 ('Elaborate Indigenous artistic techniques and designs in sculpture, painting, music, drama, dance, continue to thrive in traditional and evolved forms. and have intrigued art historians and the art world for centuries'); Monica B Visionà, Robin Poynor and Herbert M Cole, A History of Art in Africa (2nd edn, Prentice Hall 2005) 16-23 (noting 'European modernism's universally acknowledged debt' to African art and describing its collection, improper appropriation, and mislabelling during colonisation); Tom Greaves (ed), IPR: A Current Survey (Society for Applied Anthropology 1994) 1, 3–4; Jennie D Woltz, 'The Economics of Cultural Misrepresentation: How Should the Indian Arts and Crafts Act of 1990 Be Marketed?'(2007) 17 Fordham Intell Prop Media & Ent L J 443, 445 ('The high demand for Indian goods, fueled in part by the New Age movement and increased travel and consumerism in America in the 1970s and 1980s, results in the diversion of millions of dollars a year from Indian communities [due to counterfeits])' (footnote omitted)). For additional examples see the Traditional Maasai Beaded Fringe, in Allison M Kotowicz, 'Maasai Identity in the 21st Century' (2013) University of Wisconsin Milwaukee Dissertation 100, as compared to the Beaded Fringe from the 2016 Valentino Spring / Summer Collection at Sarah Mower, 'Spring 2016 Ready-To-Wear Collection: Valentino' (October 2015) Vogue https://www.vogue.com/fashion-shows/spring-2016-ready-to-wear/valentino; and New Zealand Maori Carvings and Depictions on Shower Curtains, in 'Store Sells 'Profoundly Hurtful' Maori Shower Curtains Depicting Tribal Leaders' (June 2016) STUFF: BUS. DAY http://www.stuff.co.nz/business/81277960/ Store-sells-profoundly-hurtful-Maori-shower-curtains-depicting-tribal-leaders>.

¹⁴ As Professor Paul Kuruk explains: 'Advanced technological processes have facilitated the commercial exploitation of works of art, craft, and knowledge of



Figure 5.2 Early 20th-centrury Romanian coat and Tory burch copy

and Tory Burch copy provides a striking example of this trend.¹⁵ Sadly, the demand for endangered species-derived prestige items also shows no sign of waning.¹⁶

traditional societies on a scale that is unprecedented.... Associated with these forms of folklore commercialization is a serious concern that traditional societies may be short-changed or even harmed during the process.... These communities are also harmed by uses that degrade cultural items to the extent the items are displayed outside their traditional setting and for purposes different from those for which they were originally created. For instance, this occurs when religious artifacts are sold as mere decorative art. There is further harm where commercial copies of cultural works misrepresent communal values, are of inferior quality, or are made from different materials.' Paul Kuruk (n14) 770–73.

Mary Anderson, 'The UN Wants to Make Cultural Appropriation Illegal' (June 2017) ('The issue is bigger than just copying a design – cultural appropriation is one brand profiting off of another culture's creations') https://www. revelist.com/style-news/un-cultural-appropriation/8128/the-issue-is-bigger-tha n-just-copying-a-design--cultural-appropriation-is-one-brand-profiting-off-of-an other-cultures-creations/2>. See also Adrija Sen, 'Dior Has (Again) Copied a Local Artist's Design. When Are We Going to Hold Brands Accountable?' (July 2018) Vagabomb https://www.vagabomb.com/Dior-Has-Again-Copied-a- Local-Artists-Design/> ('Bihor, a small village in Romania. Bihor is taking on the international giant for blatantly copying a Romanian folk coat, and passing it off as their own design in their pre-fall 2017 collection'); See also Andželika, 'Romanian People Noticed that Dior Copied Their Traditional Clothing and Decided to Fight Back in a Genius Way' ('The issue is bigger than just copying a design – cultural appropriation is one brand profiting off of another culture's creations') https://www.boredpanda.com/dior-copy-traditional-romanian-design-clo thes/?utm_source=google&utm_medium=organic&utm_campaign=organic> (describing communities ad campaign).

See also Rachel Nuwer, 'A Mausoleum for Endangered Species' New York

Another area of expanding design interest is in patterns and materials created through biotechnology. The do-it-yourself ethos common to synthetic biology¹⁷ aficionados is helping to fuel a biodesign explosion that includes fashion and fabrics, such as leather 'grown' from mushrooms and scarves dyed with bacterial secretions.¹⁸ We are living in a brave new biocreative world.

The increasing awareness of the value of design protection is also evident in efforts to facilitate the ability to gain such protection globally. The World Intellectual Property Organization (WIPO) Hague Agreement Concerning the International Registration of Industrial Designs (the 'Hague Agreement') allows applicants to file a single application that can contain up to 100 designs, which creates protection in all member countries that do not indicate rejection of the application within a specified period.¹⁹ The United States fully joined the Geneva Act of the Hague Agreement²⁰ in 2015,²¹ extending this benefit to US designers and paving the way

Times (July 2017) (describing a Colorado repository containing 1.3 million confiscated items).

¹⁷ Synthetic biology involves the design and construction of novel artificial biological pathways, organisms or devices, or the redesign of existing natural biological systems and the creation of standardised biological parts that can be assembled into more complex modules to perform particular functions. For a discussion of synthetic biology issues relating to genetic resources and associated traditional knowledge research, see Nat'l Acads of Sci Eng'g & Med, 'A Proposed Framework For Identifying Potential Biodefense Vulnerabilities Posed by Synthetic Biology: Interim Reports' (2017); see also Margo A Bagley, 'Digital DNA: The Nagoya Protocol, Intellectual Property Treaties, and Synthetic Biology' (2015) https://www.wilsoncenter.org/publication/digital-dna-the-nagoya-protocol-intellectual-property-treaties-and-synthetic-biology

18 See for example MyCoworks < http://www.mycoworks.com/#about> (leathers grown from mushrooms and agricultural byproducts). See also; Natsai Audrey < http://natsaiaudrey.co.uk/> (describing a design-led microbiology protocol that replaces harmful synthetic pigments with natural dyes excreted by bacteria used to produce scarves dyed with bacterial secretions) and Priscilla Frank, 'Incredible Bacteria-Laced Fabric Combines Art, Biology and Fashion' (December 2017) Huffington Post < http://www.huffingtonpost.com/2014/12/19/the-fold-studionatasai-au_n_6340294.html>).

¹⁹ See Geneva Act of the Hague Agreement Concerning the International Registration of Industrial Designs (July 1999) 2279 UNTS 3, ch 1.

The Hague Agreement comprises three independent acts: the London Act of 1934, the Hague Act of 1960 and the Geneva Act of 1999. See WIPO, 'Summary of the Hague Agreement Concerning the International Registration of Industrial Designs' https://www.wipo.int/treaties/en/registration/hague/summary_hague.html.

21 Press Release, US Patent & Trademark Office, 'United States Deposits Instrument of Ratification to Geneva Act of the Hague Agreement Concerning for increased use of the Hague system. WIPO, which administers the agreement, received 5,562 applications containing a total of 18,716 designs via the Hague system in 2016, representing a 35 per cent increase over 2015 and the seventh consecutive year of growth in filings.²²

While the Hague Agreement creates an international, centralised registration system, it does not directly affect the filing of design applications in national offices. Countries seeking the harmonisation and simplification of industrial design formalities at the national level thus have been working to achieve that end through negotiation of another international instrument – the draft Design Law Treaty (DLT) currently under discussion in the WIPO Standing Committee on the Law of Trademarks, Industrial Designs and Geographical Indications (SCT). The DLT, which is intended to be a formalities treaty but may have some substantive effects, is expected to facilitate obtaining design rights globally by limiting the requirements countries may impose on design protection applicants.²³

These three areas of increasing interest – design protection, creative cultural motifs, and biotech-derived design elements – may appear disparate, yet they are converging in ways that raise concerns for some low- and middle-income countries (LMICs) that are rich in biological diversity, traditional knowledge, and creative cultural products and artefacts. This is because cultural and genetic resources, namely traditional cultural expressions (e.g., designs, artefacts, carvings and paintings),²⁴

the International Registration of Industrial Designs' (February 2015) https://www.uspto.gov/about-us/news-updates/united-states-deposits-instrument-ratification-geneva-act-hague-agreement.

WIPO (n 8) (select the 'Hague' tab and further select '7 – Designs in applications by office' under indicator, 'Yearly statistics' under report type, 2010 to 2016 under year range, and 'Total' under office of contracting party).

²³ See WIPO, 'Relationship Between the Hague System for the International Registration of Industrial Designs and the Draft Design Law Treaty' (2013) WIPO SCT/29/4 (Relationship Between the Hague System and the Draft Design Law Treaty) ss 1, 4, 5, 12.

²⁴ See for example 'Totem Bottle', Can Indus Design No 151,320 (registered 23 July 2014). For further examples see Priya Patel, 'My Culture Is Not Your Couture' Odyssey (2016) https://www.theodysseyonline.com/my-culture-is-not-your-couture; Alexandra J Roberts (@lexlanham) Twitter (October 2017) https://twitter.com/lexlanham/status/916379949161959424?lang=en; Aboriginal Industrial Designs http://nationalaboriginaldesignagency.com.au/category/media/; Can Des Reg 151320 'Totem bottle' (2014); Fr Des Reg 20125711-0003 'Parure africaine II'; Fr Des Reg 'African warrior decorative pattern' 962966-0007 (1996); Fr Des Reg 28023-0001 'African box' (1936); Fr Des Reg 932111-0016 'Bride mule'; Chinese Des Pat 201530476508.4 'Teacup pad' (2015); Chinese Des Pat 'African



Source: Aranda (2018), https://www.aranda.co.za/>.

Figure 5.3 Traditional Basotho blanket designs

traditional knowledge (e.g., distinctive weaving or painting techniques),²⁵ and biological or genetic resources (e.g., DNA, enzymes, fibres and microorganisms),²⁶ can be used to create protectable designs.²⁷ A recent example concerns traditional Basotho blanket designs, some of which are shown in Figure 5.3. Louis Vuitton's production of a shirt with strikingly similar design raises clear issues of cultural appropriation.²⁸ A controversy in the WIPO SCT regarding policy space for design application disclosure of origin requirements²⁹ relating to such cultural and genetic resources

mask' 201430452690.5 (2014); Fr Des Reg 20123822 – 015; 'Navajo bracelet'; Fr Des Reg 20134945 - 001 'Yuma bracelet'; Fr Des Reg 20135496 – 001 'Carré de soie 80x80, collection Kwa Zulu'.

²⁵ See (n 15). For a Ghanaian Kente pattern on a Christian Louboutin bag, see Figure 5.4.

²⁶ See (n 17) and (n 18).

See (nn 119–42) and accompanying text.

²⁸ See Mary Corrigall, 'Fab or Cultural Faux Pas? Louis Vuitton's Basotho Blanket-Inspired Collection' (July 2017) Sunday Times https://www.timeslive.co.za/sunday-times/lifestyle/fashion-and-beauty/2017-07-13-the-evolution-of-the-basotho-blanket/. See also Aranda (2018) https://www.aranda.co.za/. See also Mayeni Jones, 'When does cultural borrowing turn into cultural appropriation?' BBC Africa (2017) https://www.bbc.com/news/world-africa-41430748 ('Blankets from Lesotho are at the centre of controversy in the fashion world, with some arguing that powerful people are appropriating them for their own benefit').

²⁹ This chapter does not address the normative question of whether disclosure of origin requirements are beneficial or negatively impact legal certainty. Various authors have explored such questions, and this author addresses them in Margo A Bagley, 'Of Disclosure "Straws" and IP System "Camels": Patents, Innovation,

is a manifestation of these concerns. Triggered by an African Group proposal,³⁰ the controversy has brought negotiations on the DLT to a virtual standstill.

At the time of writing, WIPO Members are engaged in protracted, text-based discussions in the WIPO Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge, and Folklore (IGC), which may result in one or more legal instruments directed to genetic resources, traditional knowledge, and traditional cultural expressions.³¹ However, it is very possible that a decision on the content of the draft DLT could constrain outcomes relating to disclosure provisions in the IGC texts, raising policy coherence concerns that may not be immediately apparent to negotiators in either committee.

This chapter focuses on the controversy in the WIPO SCT over the draft DLT cultural and genetic resource disclosure of origin provision, on possible justifications countries may have for desiring the flexibility to impose disclosure requirements on design protection applicants, and on the broader ramifications of the dispute for negotiations in the IGC. Section II provides an introduction to design protection regimes and the WIPO draft DLT. Section III describes the African Group's proposal for cultural and genetic resource disclosure of origin policy space in the draft DLT, arguments for and against the proposal, and developments in national and regional traditional knowledge, traditional cultural expression, and biological and genetic resource protection systems that ostensibly led to the proposal. Section IV focuses on advances in biotechnology that are fuelling the design creation and the biological and genetic resource misappropriation³² concerns that, in part, underlie the desire for disclosure or origin policy space. Section V provides concluding thoughts on the controversy.

and the Disclosure of Origin Requirement' in Daniel F Robinson, Ahmed Abdel-Latif and Pedro Roffe (eds), *Protecting Traditional Knowledge: The WIPO Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore* (Routledge 2017) 85. Rather, the focus of this chapter is on whether countries should have the policy space to impose disclosure of origin requirements in industrial design applications.

³⁰ See (nn 76–84).

³¹ See Bagley (n 29) 89–90.

³² The term 'misappropriation' has many meanings and may include uses of resources that may have been properly acquired for one purpose, but are being used for a non-permitted purpose or by unauthorised parties: 'Misappropriate', New Oxford American Dictionary (3rd edn, Oxford 2016).

II. DESIGN LAW AND THE WIPO DRAFT DESIGN LAW TREATY

Design protection encompasses a wide swath of eligible subject matter. There are 219 international design classification categories and 5,167 entries, ranging from automobiles to salad bowls to zip fasteners.³³ The design right covers the ornamental appearance of a useful article. For example, design protection in the United States applies to 'an ornamental design' for 'an article of manufacture', ³⁴ while the European Union applies design protection to the 'appearance' of an 'industrial or handicraft item' ³⁵ and China limits such protection to new designs for the shape or pattern of products that 'are rich in an aesthetic appeal and are fit for industrial application'. ³⁶ Regardless of jurisdiction, design protection generally is available for designs not solely dictated by the function of the product in which the design subsists or to which it is applied. Such protection does not, however, extend to the way the product works, which is the province of utility patents. ³⁷

Article 25 of the Agreement on Trade Related Aspects of Intellectual Property (TRIPS) specifies that '[m]embers shall provide for the protection of independently created industrial designs that are new or original';³⁸ however, TRIPS does not stipulate the means of protection that countries must adopt. As such, it is unsurprising that national design protection systems, while having some commonalities, retain a number of distinctive differences.

³³ WIPO, 'International Classification for Industrial Designs' (10th edn 2013) 501E/10 119, 131, 155; WIPO, 'About the Locarno Classification' http://www.wipo.int/classifications/locarno/en/preface.html. See Locarno Agreement Establishing an International Classification for Industrial Designs (signed on 8 October 1968) 828 UNTS 435.

³⁴ 35 USC (2012), s 171(a).

³⁵ Council Regulation (EC) 6/2002 of 12 December 2001 on Community Designs [2002] OJ L 3/1, art 3(a) (CDR).

³⁶ Zhonghua Renmin Gongheguo Zhuanli Fa (中华人民共和国专利法) (Patent Law of the People's Republic of China) 2009, art 2.

See for example Industrial Design Act 1985 (Canada), s 5.

³⁸ Agreement on Trade-Related Aspects of Intellectual Property Rights (opened for signature 15 April 1994, entered into force 1 January 1996) 1869 UNTS 299 (TRIPS).

A. Design Protection Regimes

Most countries, including the members of the European Union, Brazil, Canada, many African countries, Japan and South Korea, protect designs as a distinct IP right separate from patents.³⁹ For example, the EUIPO, the agency responsible for EU-wide design protection, grants a registered community design (RCD) that protects 'the appearance of the whole or a part of a product resulting from the features of, in particular, the lines, contours, colours, shape, texture and/or materials of the product itself and/or its ornamentation'.⁴⁰

While the design covered by the RCD is required to be novel, the EUIPO – as with most other industrial design offices – does not engage in a substantive novelty examination during the registration process; instead, the application undergoes a purely formal, relatively speedy review. ⁴¹ Thus, design protection can often be obtained more quickly and less expensively than a utility patent. Yet a design right can be just as valuable as a utility patent if infringement is found and an injunction barring importation or sale of the article embodying the design is granted. Such an EU-wide injunction was granted, albeit temporarily, against Samsung in 2011 in its wide-ranging litigation with Apple over, inter alia, cellphone and tablet designs. ⁴² The injunction barred the sale of certain Samsung

³⁹ See Industrial Property Code 1996 (Brazil); CDR, art 3(a); Ishō-hō (Design Act) Law 1959 (Japan), art 9; Patents and Designs Act 1990 (Nigeria), s 12; San-eob Dijain Bohobeob (Industrial Design Protection Act) 1961, art 2(1).

⁴⁰ CDR, art 3 (a).

Ibid s 18; see Gordon Humphreys, 'Legal Reform of the Community Design: A Precis of Two Reports' (2017) http://fordhamipinstitute.com/wp-content/ uploads/2017/04/Humphreys_Gordon_Article2017.pdf>. Canada is an exception as the Industrial Design Act specifies that '[t]he Minister shall examine each application for the registration of a design to ascertain whether the design meets the requirements of this Act for registration', Industrial Design Act (Canada), s 5. The United States is another exception as US law also requires design patent applications to be substantively examined for novelty and non-obviousness (See 37 CFR s 1.104 (2018)). However, according to Professor Crouch, the United States actually has a de facto registration system: '[T]he USPTO's examination of design patent novelty can best be described as a farce. In a 2010 study, I found that the vast majority of design patent applications do not receive even a single rejection during the examination process and only 1.2% are the subject of an obviousness or novelty rejection.' Dennis Crouch, 'UK Appellate Court Confirms Pan-European Win for Samsung on iPad Community Design Charges' (October 2010) Patentlyo https://patentlyo.com/patent/2012/10/apple-samsung-european-community-desi gn.html>.

⁴² Hyunjoo Jin and Poornima Gupta, 'Apple Blocks Samsung from Selling Galaxy Tablet in EU' (August 2011) Reuters https://www.reuters.com/article/

tablets in the European Union based on Apple's RCD despite the fact that the RCD did not extend protection to the way the Apple tablet worked or how it was made.⁴³

While most countries protect designs with *sui generis* design regimes, a few countries – including the United States and China – protect designs through the grant of patents. A design patent is simply a type of patent granted on the ornamental design of a functional item. While a standard utility or invention patent protects the way an article is used or works, a design patent protects the way it looks.⁴⁴ However, as noted above, the design cannot be dictated solely by the function of the article. In other words, if the article needs that particular design in order to work properly or more effectively, the design is not protectable.

Design protection can be very beneficial. Its advantages include speedy, often purely formal examination, the establishment of an alternative basis to utility patents for alleging infringement, and the possible remedies of injunctive relief and damages.⁴⁵ The term of design protection varies across jurisdictions from a short three years for unregistered community designs in the European Union to 25 years for EU-registered community designs, 15 years for US design patents, and 10 years for design rights in China and Canada.⁴⁶ The exclusivity afforded by design protection may

us-apple-samsung-injunction/apple-blocks-samsung-from-selling-galaxy-tablet-ineu-idUSTRE7786RY20110810>.

- ⁴³ See Cyrus Farivar, 'German Court Suspends EU-Wide Injunction Against Samsung' (August 2011) Deutsche Welle https://www.dw.com/en/german-court-suspends-eu-wide-injunction-against-samsung/a-15323043; Chris Foresman, 'Apple's Worldwide Court Battles v Samsung: Where They Stand' (September 2011) Wired https://www.wired.com/2011/09/apple-court-battles-samsung/.
- ⁴⁴ See US Patent & Trademark Office, 'Manual of Patent Examining Procedure' (9th edn 2018) s 1502.01 (USPTO Manual). 'In general terms, a "utility patent" protects the way an article is used and works, while a "design patent" protects the way an article looks. The ornamental appearance for an article includes its shape/configuration or surface ornamentation applied to the article, or both. Both design and utility patents may be obtained on an article if invention resides both in its utility and ornamental appearance.'
- ⁴⁵ See Andrew Beckerman-Rodau, 'Design Patent Evolution: From Obscurity to Center Stage' (2015) 32 Santa Clara High Tech LJ 53, 57 ('In most countries an industrial design registration system is used under which a design is registered without any examination of the design by a governmental agency'); David Orozco, 'Rational Design Rights Ignorance' (2009) 46 Am Bus LJ 573, 585 ('Design patent infringement can lead to significant monetary damages, and . . . it offers the owner the right to request a preliminary injunction').
- ⁴⁶ See for example 35 USC (2012), s 173; Industrial Design Act 1985 (Canada), s 10(1); Zhonghua Renmin Gongheguo Zhuanli Fa (中华人民共和国专利法) (Patent Law of the People's Republic of China) 2009, s 42; CDR, arts 11–12.

also allow a registrant to segue into perpetual trade dress protection if the design comes to serve as a non-functional indicator of source or origin, which happened with the distinctive shape of the Coca-Cola soft drink bottle.⁴⁷

How one determines infringement of a design right also varies by jurisdiction. In the United States, courts consider whether two designs are substantially similar from the perspective of an ordinary observer familiar with prior art designs. For EU RCDs, an infringing design comprises 'any design which does not produce on the informed user a different overall impression', where the informed user is deemed to be aware of existing designs. Importantly, even though the registration may indicate the type of item to which the design is applied, protection extends to incorporation of the design in any product. On the design in any product.

The subject matter of design often can be protected by copyright or trade mark law, raising cumulation and pre-emption concerns. Design protection is also available for surface ornamentation or patterns, which generally qualify for copyright protection as artistic works as well. From one perspective, the protection of distinct patterns makes sense as many design patents for the appearance of articles do not include the pattern that actually appears on the article as it is produced and sold. A US

⁴⁷ For the original design of Coca-Cola's signature contour bottle, see US Patent No 48,160 (filed 16 November 1915). See Phil Mooney, 'The Contour Bottle Is Born' (2009) Coca-Cola http://www.coca-colacompany.com/stories/ the-contour-bottle-is-born>; see also Burstein (n 6) 131–32 (describing how a design patent can help its owner obtain trade dress protection); Tiffany Mahmood, 'Design Law in the United States as Compared to the European Community Design System: What Do We Need to Fix?' (2014) 24 Fordham Intell Prop Media & Ent LJ 555, 581 ('Trade dress provides protection for packaging and products that have essentially become part of the designer's brand').

⁴⁸ See Egyptian Goddess Inc v Swisa Inc (2008) 543 F3d 665, 670 (Fed Cir).

⁴⁹ CDR, art 10(1).

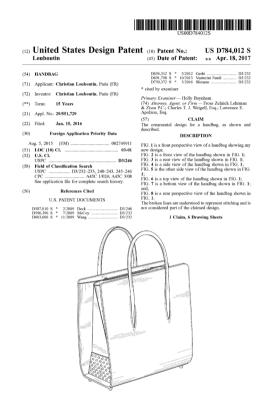
⁵⁰ See Procter & Gamble Co v Reckitt Benckiser (UK) Ltd [2006] EWHC 3154 [21]–[22].

⁵¹ See Dinwoodie and Janis (n 2) 24 (identifying a 'cumulation/preemption' problem illustrated by the design protection laws of the United States and certain foreign jurisdictions: 'should a designer be able to claim rights in the same design under multiple regimes ("cumulation"), or should protection under one regime preclude protection under another ("preemption")?').

⁵² Richard Stim, 'Design Patents: Ornamental Design?' (2018) Intell Prop L Firms http://www.intellectualpropertylawfirms.com/resources/intellectualproperty/patents/design-patents-w; see also US Pat & Trademark Office, USPTO Patent Full-Text Databases http://patft.uspto.gov (listing more than 300 fabric designs).

⁵³ See (n 53) and (n 54); see also US Pat & Trademark Office, 'Design

design patent for the 'Paloma' handbag as shown in Figure 5.4,⁵⁴ obtained by Christian Louboutin, and correlating product advertisement in Figure 5.5, illustrate this practice.



Source: www.uspto.gov.

Figure 5.4 Louboutin handbag design patent

Patent Application Guide' (2018) https://www.uspto.gov/patents-getting-started/patent-basics/types-patent-applications/design-patent-application-guide ('Since a design is manifested in appearance, the subject matter of a design patent application may relate to the configuration or shape of an article, to the surface ornamentation applied to an article, or to the combination of configuration and surface ornamentation'). For additional examples, see Andrew Rapacke, 'Design Patent Law: 2017 Year in Review' (2018) https://arapackelaw.com/wp-content/uploads/2018/01/2017_designpatent_YER.pdf>.

US Patent No D784,012 S (filed 15 January 2016) as well as US Patent Nos D679,099 (sheet material with camouflage pattern) and D766,598 (plaid fabric).

CHRISTIAN LOUBOUTIN

Paloma medium studded embroidered leather tote

£1,495



Source: Net-A-Porter, 'Christian Louboutin: Paloma Medium Studded Embroidered Leather Tote' https://www.net-a-porter.com/ca/en/product/838670/christian_louboutin/paloma-medium-studded-embroidered-leather-tote.

Figure 5.5 Advertisement for Louboutin 'Paloma' handbag with Kente pattern

This approach allows a manufacturer broader protection, as the design patent covers the appearance of the article even if a variety of different pattern designs are used on it in practice. Thus, if a manufacturer desires protection for a particular pattern, it would be logical to register it separately so that it would be infringed when placed on *any* article.

Concerns may arise, however, where patterns cover traditional cultural expressions or designs made using traditional knowledge. Whether Louboutin has permission from the Ghanaian government to use the Kente pattern is unknown.⁵⁵ Even if not, as Professor Osei-Tutu rightly

⁵⁵ Ghana Copyright Act 2005, s 76 provides explicit protection for Kente designs and vests rights in the president of Ghana in trust for the Republic of Ghana's citizens. See Begona Venero Aguirre and Hai-Yuean Tualima, 'WIPO

explains, uses of traditional knowledge or traditional cultural expressions in countries where they are not protected under domestic law is not illegal, and there is no international treaty requiring countries to provide such protection.⁵⁶ It is also unclear whether Louboutin has sought design protection for the Kente-based pattern appearing on the 'Paloma' handbag in Figure 5.5. Such a pattern, if original, is eligible for design protection that is covered by design rights.

Likewise, the cited examples above are the type of subject matter that is eligible for design protection, but they are not known to be the subject of design protection. At least two factors contribute to the difficulty in ascertaining whether a design is, in fact, protected by a design right. First, searching for designs is challenging as one is effectively searching for pictures using words. Moreover, the IP offices granting such rights do not require detailed word descriptions for the designs, as what the design covers is expected to, in effect, speak for itself. Thus a vast array of visually distinct and diverse images may be protected by registrations that simply describe them as 'surface ornamentation for fabric', 'tartan', or the like, and giving no indication by appellation of the specific features or origin of the protected design.⁵⁷

Second, many countries allow registrants to delay publication of a design registration for a specified time period, a practice that will be mandatory (minimum six-month publication delay) under the provisions of the draft DLT.⁵⁸ Thus, a design application may have been filed and a design registered, yet third parties would be unaware of the grant of protection until at least six months after the right had been granted.

Design protection has long been one of the least harmonised areas of IP law. TRIPS devotes a mere two articles to industrial design protection, compared to six for copyright (which explicitly incorporates provisions from the Berne Convention for the Protection of Literary and Artistic

Protect and Promote Your Culture: A Practical Guide to Intellectual Property for Indigenous Peoples and Local Communities' (2017) 27 http://www.wipo.int/edocs/pubdocs/en/wipo_pub_1048.pdf>.

⁵⁶ J Janewa Osei-Tutu, 'Harmonizing Cultural IP Across Borders: Fashionable Bags & Ghanaian Adinkra Symbols' (2017) 51 Akron L Rev 1197.

⁵⁷ See Communication from the United States, 'Traditional Cultural Expressions: A Discussion Paper' (2017) WIPO/GRTKF/IC/33/; see also Scottish Reg Tartans, 'About Us' (2018) https://www.tartanregister.gov.uk/aboutUs>.

⁵⁸ See Draft Design Law Treaty, art 9 ('A Contracting Party shall allow the industrial design to be maintained unpublished for a period fixed by its applicable law, subject to the minimum period prescribed in the Regulations'); Draft Regulations Rule 6 ('The minimum period referred to in Article 9(1) shall be six months from the filing date or, where priority is claimed, from the priority date').

Works), seven for trade marks (10 including provisions on geographical indications, which some countries address under trade mark law), and eight for patents. ⁵⁹ According to Jerome Reichman, 'industrial design has posed the intellectual property world's single most complicated puzzle'. ⁶⁰ Jason Du Mont and Mark Janis likewise note that '[t]he design protection debate is one of intellectual property law's most intractable, engrossing decades of legislative effort in the United States alone'. ⁶¹

Despite this lack of harmony, or perhaps because of it, the draft DLT requirements putatively reflect areas of convergence and common trends among member states.⁶² As discussed below, this push for convergence in relation to a newly popular and controversial right is creating an existential challenge to the WIPO draft DLT negotiations and raising fundamental questions regarding cultural values, legal experimentation, and policy coherence.

B. The WIPO Draft DLT: Substantive Formality

The draft DLT is principally directed toward making the cross-border acquisition and protection of industrial design rights more efficient and effective. ⁶³ Like the WIPO Patent Law Treaty (PLT), the DLT is styled as a formalities treaty. ⁶⁴ As such, it ostensibly focuses on minimising administrative requirements that countries can impose on applicants who apply for protection in a member state. The DLT does not purport to change the substantive scope of a country's domestic design law. For example, the DLT (like the Berne Convention, Paris Convention and TRIPS) does not provide a definition of a protectable design.

This is not to say, however, that characterising the DLT as a formalities treaty means it, in fact, has no effect on substantive aspects of domestic design law. The draft DLT contains several nominally formal provisions with arguably substantive effects. For example, Article 17 prevents any

⁵⁹ See generally TRIPS (n 38).

⁶⁰ Jerome H Reichman, 'Past and Current Trends in the Evolution of Design Protection Law – A Comment' (1993) 4 Fordham Intell Prop Media & Ent LJ 387, 387.

⁶¹ Du Mont and Janis (n 2) 839–40.

Relationship Between the Hague System and the Draft Design Law Treaty, s 13 (noting the DLT provisions 'were established as a result of a process that identified areas of convergence and common trends among members of the SCT').

⁶³ Ibid ss 3–5.

⁶⁴ Ibid s 4 ('The aim of the draft DLT is to establish a dynamic and predictable legal framework for the simplification and harmonization of industrial design formalities and procedures set by national/regional offices').

country that requires recorded licences of design rights from invalidating a registration for non-compliance with that requirement.⁶⁵ Moreover, the draft DLT regulations would require countries to allow use of dotted lines to indicate unclaimed subject matter, a tool that effectively expands the scope of the design right.⁶⁶

Article 3 of the proposed DLT is the heart of the treaty and prescribes a 'closed' list of elements or information that countries can require of applicants seeking to protect designs in DLT member states.⁶⁷ Put differently, it sets out the *maximum* content that can be required in a design application by a contracting party to the DLT.⁶⁸ For example, it allows countries to require applicants to provide their name and address, a registration request, correspondence information, representation of the design, and an indication of the product(s) incorporating the design.⁶⁹

However, by delineating a closed list of application requirements that countries can impose on applicants, the DLT in effect moves beyond formalities to placing substantive limits on countries in relation to design registration. In response, a group of countries has been seeking to create space in the agreement for both substantive and formal policy flexibility.

⁶⁵ WIPO, 'Industrial Design Law and Practice – Draft Articles' (2015) SCT/33/2.

⁶⁶ See also Dinwoodie and Janis (n 2) 2014–2015. Waltmire describes an excellent illustration from the *Apple v Samsung* litigation: 'The Samsung Galaxy S 4G smartphone on the right has a different back shape and lacks a circular home button on the front as compared to the [iPhone patent,] . . . [b]ut a jury determined that the Galaxy infringed the [iPhone patent] in the case of *Apple v Samsung*. . . . Did the jury ignore those different elements of the Galaxy phone? Yes. And they were right to ignore them. Apple drafted the [iPhone patent] in a way that requires that the differences in the back shape and the home button be ignored. Apple did that by providing those features in broken lines. . . . If Apple would have shown all sides and all features of the iPhone in solid lines in [its patent], then it is possible that the jury would have determined that the Galaxy did not infringe the [iPhone patent].' Eric Waltmire, 'How to Broaden Design Patent Protection with Broken Lines: Apple v Samsung' (May 2015) Eric Waltmire's Blog http://www.waltmire.com/2015/05/07/ broaden-design-patent-protection-broken-lines-apple-v-samsung/>.

⁶⁷ WIPO (n 65) 6–8.

⁶⁸ See Relationship Between the Hague System and the Draft Design Law Treaty, s 4 ('The draft DLT does not create a single set of standard requirements, but rather a maximum set of requirements to be applied by the Offices of Contracting Parties').

⁶⁹ See WIPO, 'Industrial Design Law and Practice – Draft Articles' (2016) SCT/35/2.

III. THE AFRICAN GROUP DISCLOSURE OF ORIGIN PROPOSAL

Just a decade ago, a requirement that a designer disclose the origin of traditional cultural expressions, traditional knowledge, or biological or genetic resources used in creating a design in an application to register the design was virtually unheard of in national or regional protection systems for any type of IP right. Yet, as a recent WIPO study confirms, disclosure of origin requirements are proliferating – particularly in relation to utility patents and genetic resources. I

While there are no definitive definitions for the terms, another recent WIPO publication describes traditional knowledge as being generally understood to encompass 'the know-how, skills, innovations and practices developed by indigenous peoples and local communities' and traditional cultural expressions as generally referring to 'the tangible and intangible forms in which traditional knowledge and cultures are expressed'. ⁷² Genetic

⁷¹ See WIPO, 'Key Questions on Patent Disclosure Requirements for Genetic Resources and Traditional Knowledge' (2017) http://www.wipo.int/edocs/pubdocs/en/wipo_pub_1047.pdf> ('At the time this study was published, more than 30 countries – including both developed and developing countries – had implemented such requirements through national or regional laws').

⁷² See Aguirre and Tualima (n 55) 9. The term 'traditional' in both phrases relates not to the age of the subject matter – new traditional knowledge and new traditional cultural expressions are constantly being created – rather, it refers to the manner and communal context in which the cultural resources are created. See Matthias Leistner, 'Analysis of Different Areas of Indigenous Resources: Traditional Knowledge' in Silke von Lewinski (ed), *Indigenous Heritage and Intellectual Property* (Kluwer Law International 2004) 49, 56. Exact definitions for traditional or indigenous knowledge and new traditional cultural expressions differ and are the subject of heated discussion in the WIPO IGC, but these phrasings will be used for the purposes of this chapter. See for example ibid 55–56.

Telling: Can "Disclosure of Origin" Requirements in Patent Applications Make a Difference?' (2007) 19 JWIP 149, 156 ('To date, [disclosure or origin requirements] have had limited impact . . . because they have not been in place very long [and] . . . they only refer to national patent applications . . . Consequently, there have been very few patent applications in which disclosure has been made'). Since that time, the international community has seen the enactment of the Nagoya Protocol and Swakopmund Protocol, as well as domestic laws requiring disclosure. See Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilisation to the Convention on Biological Diversity (opened for signature 2 February 2011, entered into force 12 October 2014) (Nagoya Protocol); Swakopmund Protocol on the Protection of Traditional Knowledge and Expressions of Folklore (9 August 2010) (Swakopmund Protocol).

resources are defined in the Convention on Biological Diversity (CBD) as 'genetic material [defined as 'material of plant, animal, microbial or other origin containing functional units of heredity'] of actual or potential value' (tangible and intangible).⁷³ The CBD also defines biological resources to include 'genetic resources, organisms or parts thereof, populations, or any other biotic component of ecosystems with actual or potential use or value for humanity'.⁷⁴

As awareness concerning different ways in which cultural and genetic resources can be misappropriated is evolving, some developing countries have begun exploring whether disclosure of origin requirements are appropriate in the design context and, in some cases, are already instituting them. Thus, it is not completely surprising that in November 2014 the African Group inserted an additional item into Article 3's closed list that ultimately brought negotiations on the DLT to an impasse. The provision would allow, but not compel, countries to require the disclosure of the origin of traditional cultural expressions, traditional knowledge, or biological or genetic resources used in creating a design. The proponents deemed this amendment necessary because, as noted above, protectable designs can be based on and use all three types of subject matter.

The African Group offered an improved version of the amendment during the 34th session of the WIPO SCT in November 2015, which is now reflected in the current draft articles:⁷⁷

(1) [Contents of Application; Fee] (a) A Contracting Party may require that an application contain some, or all, of the following indications or elements:

(i) a request for registration;

⁷³ Convention on Biological Diversity (opened for signature 5 June 1992, entered into force 29 December 1993) 1760 UNTS 79; 31 ILM 818 (CBD), art 2.

⁷⁴ Ibid.

⁷⁵ See generally WIPO, Disclosure Requirements Table (2017) http://www.wipo.int/export/sites/www/tk/en/documents/pdf/genetic_resources_disclosure.pdf.

⁷⁶ Catherine Saez, 'WIPO New Proposal on Disclosure Requirement in Design Applications' (November 2014) Intell Prop Watch http://www.ip-watch.org/2014/11/25/wipo-new-proposal-on-disclosure-requirement-in-design-applications/>.

⁷⁷ WIPO, 'Industrial Design Law and Practice II; see also WIPO, 'Standing Comm on the Law of Trademarks, Indus. Designs & Geographic Indications' (2016) SCT/34/8 (SCT Report I).

- [(ix) a disclosure of the origin or source of traditional cultural expressions, traditional knowledge or biological/genetic resources utilized or incorporated in the industrial design;]
- (x) any further indication or element prescribed in the Regulations.

To be clear, the African Group proposal was and is intended to be permissive, giving countries the right, but not the obligation, to require disclosure of origin – unlike the mandatory disclosure of origin provision many countries are seeking in the IGC negotiations. The African Group proposal is justifiably important for several reasons:

- It strengthens complementarity and mutual supportiveness of the traditional cultural expressions, traditional knowledge, and biological or genetic resources international regime complex⁷⁹ that involves scientific, cultural, and natural resources.
- It enables policy coherence across IP, biodiversity, cultural resources, human rights, and trade regimes.
- It can facilitate member state compliance with access and benefitsharing (ABS) obligations under national, regional and international laws and agreements by increasing transparency in domestic design protection systems.
- It provides domestic policy space for beneficial legal experimentation.⁸⁰

To call the African Group proposal controversial would be an extreme understatement. Countries opposed to the African Group amendment to Article 3 launched a vigorous and sustained objection to the proposal based on four primary concerns:

⁷⁸ For a discussion of the WIPO IGC disclosures of origin issue, see Bagley (n 29) 98; Georges Bauer, Cyrill Michael Berger and Martin Girsberger, 'Disclosure Requirements: Switzerland's Perspective' in Robinson, Abdel-Latif and Roffe (n 29) 244; Dominic Keating, 'The WIPO IGC: A US Perspective' in ibid 265; Dominic Muyldermans, 'Genetic Resources, Traditional Knowledge and Disclosure Obligations: Some Observations from the Life Science Industry' in ibid 230.

⁷⁹ See Kal Raustiala and David G Victor, 'The Regime Complex for Plant Genetic Resources' (2004) 58 Int'L Org 277, 279 (introducing the concept of regime complexes).

⁸⁰ See WIPO, 'Standing Comm on the Law of Trademarks, Indus Designs & Geographical Indications' (2016) SCT/35/8 (SCT Report II); SCT Report ss 21, 29, 56, 57; Saez (n 76).

- The African Group proposal was introduced very late in the DLT negotiation process when the agreement was largely finalised in anticipation of a diplomatic conference, and the only outstanding issue was believed to be technical assistance.
- Disclosure of origin requirements are not common core features of industrial design systems and do not belong in a formalities treaty, or at most could be accommodated by interpretation of the draft regulations to the DLT.⁸¹
- A disclosure of origin requirement would introduce untenable uncertainty for designers and create a chilling effect on filings by serving as a basis for rejection or invalidation involving the application of vague criteria.
- The origin of genetic resources, in particular, is widely considered irrelevant to the registrability of a design. 82

Resistance to the provision's inclusion has been exceptionally strong and, to date, no agreement has been reached on various proposals to address member state concerns.

Despite the objections, the African Group – supported to varying degrees by the delegations of Iran, India, Saudi Arabia and several members of the Asia-Pacific group of countries⁸³ – has remained steadfast in its demand for disclosure of origin policy space in the draft DLT. The

Catherine Saez, 'Another Setback for Design Law Treaty at WIPO; GIs in Contention' (November 2014) Intell Prop Watch http://www.ip-watch. org/2014/11/27/another-setback-for-design-law-treaty-at-wipo-gis-in-contentio n/>; see also WIPO, 'Industrial Design Law and Practice - Draft Regulations' (2014) SCT/31/3 (listing draft Rule 2's requirements under Article 3 of the draft DLT). Draft Rule $2(1)(\bar{x})$ states that parties can also require applicants to provide 'an indication of any prior application or registration, or other information, of which the applicant is aware, that could have an effect on the eligibility for registration of the industrial design', ibid. This language seems to open up the closed list of Article 3. However, member states disagree on whether it is broad enough to include a formal or substantive disclosure of origin requirement. See SCT Report I (n 77) ss 29, 31. Moreover, Article 23(4) of the draft DLT states '[i]n the case of conflict between the provisions of this Treaty and those of the Regulations, the former shall prevail'; Industrial Design Law and Practice II, annex at 37. Consequently, the African Group expressed its discomfort with relying for disclosure of origin policy space on a regulation that appears to be in facial non-compliance with an article of the agreement. See for example SCT Report I, s 52.

 $^{^{82}}$ See SCT Report II (n 80), ss 13–14, 23, 28, 32, 34, 36. SCT Report I, annex at 2.

⁸³ SCT Report II (n 80), ss 16, 19, 20, 30, 40; SCT Report I, ss 42, 46.

timing of the introduction of the amendment is a reflection of the new and unprecedented nature of the issue in the design context. One of the challenges to legal harmonisation is that the harmonising process is slow and advances in law, science and digital technologies are creating evolving scenarios that may have been unimaginable at the time efforts to harmonise an area began.⁸⁴ Thus, it is difficult to pin down with precision whether and to what extent an area is likely to be affected by later developments. This is such an area.

For example, as work on the DLT was beginning in 2008, the objectives were to 'identify possible areas of convergence on industrial design law and practice in WIPO SCT Members, highlighting particular issues to be addressed in that context and taking into account existing international instruments'.85 The international instruments considered at that time included the Paris Convention, the PLT, the Singapore Treaty on the Law of Trademarks, and TRIPS.86 However, since that time, the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from Their Utilization to the Convention on Biological Diversity (the 'Nagoya Protocol') was adopted in 2010 and came into force in 2014, requiring compliance with ABS obligations in relation to genetic resources and associated traditional knowledge. 87 Also, the regional Swakopmund Protocol on the Protection of Traditional Knowledge and Expressions of Folklore (the 'Swakopmund Protocol') came into effect in 2015 and, as discussed below, requires several African countries to provide a variety of protections for traditional knowledge and traditional cultural expressions.⁸⁸ As the DLT is still in the negotiating phase, consideration of the interplay between the DLT and the obligations contained in these agreements seems quite ripe for consideration by the WIPO SCT.

A. Motivating Factor: Policy Space

As noted above, design protection is becoming more attractive, with increasing numbers of design applications filed each year and increasing opportunities for misappropriation of a country's cultural and genetic resources through the design system. Thus, for many developing countries

Peter K Yu, 'Currents and Crosscurrents in the International Intellectual Property Regime' (2004) 38 Loy LAL Rev 323, 434–35.

⁸⁵ WIPO (n 5) s 1.

⁸⁶ Ibid s 3.

See Nagova Protocol (n 70) art 15(1).

See Swakopmund Protocol, s 1.1; (n 91–94) and accompanying text.

grappling with the challenges arising from more traditional forms of IP such as patents and copyrights, ⁸⁹ the nuances of possible issues pertaining to design protection simply may not have been apparent earlier in the DLT negotiations.

For this same reason, few countries are currently requiring disclosure of origin in relation to design protection, but it is an emerging practice. At least 20 African countries, including South Africa and the 19 countries that comprise the African Regional Intellectual Property Organization (ARIPO),⁹⁰ are all likely to need the policy space to require disclosure of origin – at least for traditional knowledge and traditional cultural expressions incorporated into designs.

On 11 May 2015, the ARIPO Swakopmund Protocol entered into force. 91 It provides holders of traditional knowledge and expressions of folklore, also known as traditional cultural expressions, with certain rights and protections in relation to their cultural resources. In particular, section 10, relating to traditional knowledge, specifies that '[a]ny person using traditional knowledge beyond its traditional context shall acknowledge its holders, *indicate its source* and, where possible, *its origin*, and use such knowledge in a manner that respects the cultural values of its holders'. 92

Likewise, Section 19, relating to expressions of folklore (another name for traditional cultural expressions) mandates the following:

19.2. In respect of expressions of folklore of particular cultural or spiritual value or significance to a community, the Contracting States shall provide adequate and effective legal and practical measures to ensure that the rel-

⁸⁹ See Boatema Boateng, *The Copyright Thing Doesn't Work Here* (University of Minnesota Press 2011) 168.

⁹⁰ African Regional Intellectual Property Organisation (ARIPO) http://aripo.org/about-aripo/membership-member-states. ARIPO is a regional IP organization for a number of English-speaking African countries. See ARIPO, 'About Us' http://aripo.org/about-aripo/.

⁹¹ ARIPO, 'Entry into Force of the ARIPO Swakopmund Protocol on the Protection of Traditional Knowledge and Expressions of Folklore' http://www.aripo.org/news-events-publication-of-traditional-knowledge-and-expressions-of-folklore. To date, Botswana, Zimbabwe, the Gambia, Rwanda, Liberia, Malawi, Zambia, and Namibia have deposited instruments of ratification, but implementing legislation is in varying stages of completion in each country. SCT Report I, s 29; ARIPO, 'Zambia Ratifies the Swakopmund Protocol' http://www.aripo.org/news-events-publications/news/item/79-zambia-ratifies-the-swakopmund-protocol.

⁹² Swakopmund Protocol, s 10 (emphasis added).

evant community can prevent the following acts from taking place without its free and Prior Informed Consent:

[(a)]

- iv). the acquisition or exercise of intellectual property rights over the expressions of folklore or adaptations thereof;
- 19.3. In respect of the use and exploitation of other expressions of folklore, the Contracting States *shall provide adequate and effective legal and practical measures to ensure that*:
 - (a) the relevant community is identified as the source of any work or other production adapted from the expressions of folklore[.]⁹³

These provisions require ARIPO Members to, among other things, ensure proper acknowledgement and source identification of cultural resource holders and enable such holders to prevent the acquisition of IP rights over those resources and adaptations thereof. A disclosure of origin requirement for industrial design applications appears to be a necessary element for complying with these provisions of the protocol, and the draft DLT without the African Group amendment would prevent parties to the protocol from employing such a requirement. Thus, while a disclosure of origin requirement is not a common core feature of design regimes, that seems to be an insufficient reason for denying countries the right to employ these requirements to meet treaty and domestic policy objectives and obligations.

According to the WIPO Secretariat, 'the draft DLT aims at simplifying and harmonizing industrial design formalities and procedures set by national/regional offices, so as to reduce discrepancies among future Contracting Parties'. Harmonisation historically was seen as an unexceptional goal because territoriality is inefficient and imposes numerous

⁹³ Ibid ss 19.2, 19.3.

⁹⁴ The pending South African Protection, Promotion, Development and Management of Indigenous Knowledge Systems Bill 2016, in conjunction with the Intellectual Property Laws Amendment Act 2013, provides for disclosure of indigenous knowledge, indigenous cultural expressions, and indigenous knowledge associated with natural resources. See Intellectual Property Laws Amendment Act 2013 (South Africa), ss 28B(4)(b), 43B(6)(b), 53B(3)(b); Protection, Promotion, Development and Management of Indigenous Knowledge Bill B 6B 2016 (South Africa), s 13(2)(b)(iii).

⁹⁵ Relationship Between the Hague System and the Draft Design Law Treaty, s 19.

costs on inventors and creators. For this reason, certain countries and other parties with multinational interests have sought for more than a century to increase the level of harmonisation in the various global IP systems. However, harmonisation also has its downside and there is growing criticism of its negative impacts, including the way it constrains the policy choices of sovereign nations facing diverse societal needs. Moreover, harmonisation in international IP agreements does not equate to harmonisation in domestic implementing legislation and LMICs may lack the sophisticated interpretive tools high-income countries use to creatively and favourably implement treaties in national law. This, paradoxically, can result in more stringent IP protection standards in the very countries most in need of flexibility.

Another drawback of harmonisation is its negative impact on legal experimentation and domestic policy preferences. As Lisa Ouellette notes, 'optimal innovation policy likely varies across heterogeneous jurisdictions' and '[l]ocking the world into uniform[ity]' makes it difficult to assess the true impact and role of IP protection because 'empirical progress depends on policy variation'. 99 It is just such space for policy variation that the African Group proposal seeks to inject into the DLT. There are many aspects of calibrating cultural and genetic resource protection that would benefit from legal experimentation across jurisdictions, including whether a disclosure of origin requirement should be employed at all and, if so, in what form and to what ends. Countries should not be prevented from engaging in such experimentation or from adopting justifiably distinctive approaches in their domestic design regimes – especially in light of the historical lack of comparative design law harmonisation.

⁹⁶ See Edward Lee, 'The Global Trade Mark' (2014) 35 U Pa J Int'l L 917, 933;Peter K Yu, 'The International Enclosure Movement' (2002) 82 Ind LJ 827, 901.

⁹⁷ See Yu (n 84) 901–02.

⁹⁸ Ibid. An example of this phenomenon is the revised Bangui Agreement, which prevents Organisation Africaine de la Propriété Intellectuelle Members from utilising flexibilities in the Doha Declaration without first going through a judicial procedure in national civil courts. See Carolyn Deere, *The Implementation Game: The TRIPS Agreement and the Global Politics of Intellectual Property Reform in Developing Countries* (Oxford 2009) 276; see also Ruth L Okediji, 'Reframing International Copyright Limitations and Exceptions as Development Policy' in Ruth L Okediji, *Copyright Law in an Age of Limitations and Exceptions* (Cambridge University Press 2017) 448–50.

⁹⁹ Lisa Larrimore Ouellette, 'Patent Experimentalism' (2015) 101 Va L Rev 65, 67–68; see also Yu (n 84) 832 ('[T]he one-size-fits-all templates [in TRIPS and other] agreements have drastically reduced the policy space available to less developed countries').

B. Motivating Factor: Policy Coherence

The African Group proposal appears to be a reasonable tool to facilitate policy coherence. 100 African Group members and many other biodiverse countries in the global South are party to the CBD and one or more other treaties, such as the Nagova Protocol, the Food and Agriculture Organization's International Treaty on Plant Genetic Resources for Food and Agriculture, and, in some cases, regional agreements such as the Swakopmund Protocol or the Andean Decision. These countries are also in the process of modifying their domestic laws to better protect biodiversity and valuable cultural and natural resources from misappropriation. It would be illogical, and would create incoherent internal policy positions, for these countries to agree not to require disclosure of origin in design applications just when they are modifying their laws to facilitate transparency, acknowledgment of rights, and improved stewardship of cultural resources. As such, the African Group proposal could benefit all CBD members, particularly those rich in cultural and genetic resources, as it could help them comply with their ABS goals and obligations.

The issue of inserting disclosure of origin provisions into formalities treaties is not new to WIPO. Such concerns were first raised in the WIPO Standing Committee on Patents (SCP) in 1999, when a group of Latin American member states proposed inserting a disclosure of origin requirement into the draft PLT. ¹⁰¹ This turn of events precipitated a political compromise in which matters relating to genetic resources and traditional knowledge would be addressed in WIPO – but in a new forum, the IGC, and not in the SCP. ¹⁰² This allowed a diplomatic conference on the PLT to proceed to a successful conclusion, producing a treaty devoid of any mention of genetic resources or traditional knowledge. In light of this history, the myriad developments relating to genetic resources and traditional knowledge outside of WIPO such as the Nagoya Protocol, and the painfully slow progress of the IGC, it is unsurprising that the African

¹⁰⁰ See for example Jean-Frederic Morin and Mathilde Gauquelin, 'Trade Agreements as Vectors for the Nagoya Protocol's Implementation' (2016) CIGI Papers No 115, 1. See also Nuno Pires de Carvalho, 'Sisyphus Redivivus? The Work of WIPO on Genetic Resources and Traditional Knowledge' in Charles R McManis and Burton Ong (eds), *Routledge Handbook of Biodiversity and the Law* (Routledge 2018) 337, 339–40.

¹⁰¹ See Florian Rabitz, *The Global Governance of Genetic Resources: Institutional Change and Structural Constraints* (Routledge 2017) 96.

¹⁰² See Ruth L Okediji, 'Legal Innovation in International Intellectual Property Relations: Revisiting Twenty-One Years of the TRIPS Agreement' (2014) 36 U Pa J Int'l L 191, 217–18.

Group has remained adamant in its demand for disclosure of origin policy space to be explicitly retained in the draft DLT.¹⁰³

The WIPO IGC's first meeting was in 2001, and while there has been much talk in successive meetings, real progress largely began with the start of text-based negotiations in 2009. The current mandate of the WIPO IGC is to continue to engage in text-based negotiations leading to one or more international legal instruments. Recent negotiations have yielded three draft texts: a genetic resources text that would include provisions such as a requirement that inventors seeking patent protection disclose the origin of genetic resources and associated traditional knowledge used in developing a claimed invention, as well as two texts – for traditional knowledge and traditional cultural expressions texts – that would include, among other things, a suite of moral and economic rights for certain categories of traditional knowledge and traditional cultural expressions. The start of the wild include in the control of the control of the wild include in the wild

As currently written, the disclosure of origin requirement in the draft genetic resources text has the possibility of being applied to all IP applications, or only to utility patent applications, as both terms are bracketed. Hember States almost agreed to a compromise approach that would have applied the DOO requirement only to utility patent applications, while requiring consideration of the applicability of DOO to other kinds of IP applications at a future date during IGC 36 in June 2018. However, two countries blocked the revised text, and substantive discussions on genetic resources are not scheduled to resume until sometime in 2019. 109

¹⁰³ Ahmed Abdel-Latif, 'Genetic Resources, Patents and Benefit Sharing: State of Play and Challenges Facing Multilateral Discussions' in Jacque de Werra (ed), *Intellectual Property in the Pharmaceutical Industry* (Routledge 2012) 59, 63.

¹⁰⁴ International Centre for Trade and Sustainable Development, 'WIPO Traditional Knowledge Committee Pushes Toward Text-Based Talks' (December 2009) http://www.ictsd.org/bridges-news/bridges/news/wipo-traditional-knowledge-committee-pushes-toward-text-based-talks.

WIPO, 'Matters Concerning the Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore' (2015) http://www.wipo.int/export/sites/www/tk/en/igc/pdf/igc_mandate_1617. pdf>.

¹⁰⁶ See WIPO, The Protection of Traditional Cultural Expressions: Draft Articles (2014) WIPO/GRTKF/IC/28/6; WIPO, The Protection of Traditional Knowledge: Draft Articles (June 2014) WIPO/GRTKF/IC/28/5; Communication from Canada et al, 'Joint Recommendation on Genetic Resources and Associated Traditional Knowledge' (May 2014) WIPO/GRTKF/IC/28/7.

¹⁰⁷ The Protection of Traditional Cultural Expressions (n 106); The Protection of Traditional Knowledge (n 106).

¹⁰⁸ WIPO, 'IGC 36 Draft Report' (2018) WIPO/GRTKF/IC/38/REF/36/11.

¹⁰⁹ Ibid.

Moreover, the text only relates, at most, to traditional knowledge associated with genetic resources and not freestanding traditional knowledge. 110

The draft traditional knowledge text also contains a disclosure of origin requirement that cuts across all IP areas as it requires disclosure of origin in 'intellectual property applications'. As such, if the DLT is allowed to move forward without policy space for countries to require disclosure of origin in design applications, countries would be foreclosed from maintaining the current mandatory disclosure of origin provision in the traditional knowledge text as it would have to be reframed to exclude design applications.

It is possible that some countries are mistakenly viewing the African Group proposal provision as a forum-shifting tool – a strategy for the African Group to achieve via the DLT what it has been unable to obtain thus far in the IGC. 112 Such a view is erroneous. In the WIPO IGC, the African Group and many other countries are seeking new economic and moral rights in relation to traditional cultural expressions and traditional knowledge, and in the genetic resources context only, a mandatory disclosure of origin requirement for genetic resources in utility patent applications. 113 These are fundamentally different objectives to those being sought for the draft DLT, where the African Group seeks only permission for countries to be able to require disclosure of origin, and even then, only for design applications – not utility patent, trade mark, or other kinds of IP applications.

Even though the disclosure requirement could relate to biological or genetic resources, traditional knowledge, or traditional cultural expressions, this is a much narrower, much less economically significant concern

Whether or not the disclosure requirement would apply to traditional knowledge associated with genetic resources is another contested issue and the phrase is bracketed in the draft text. WIPO, 'IGC 36 Draft Report' (2018) WIPO/ GRTK F/IC/38/R EF/36/11.

The traditional cultural expressions text does not contain a disclosure of origin requirement currently. See The Protection of Traditional Knowledge (n 106) 9.

Property' (2007) 40 UC Davis L Rev 971, 981 (describing the international intellectual property system as 'a "regime complex" – a multi-issue, multi-venue, mega-regime in which governments and NGOs shift norm creating initiatives from one venue to another within the conglomerate, selecting the forum in which they are most likely to achieve their objectives').

¹¹³ See SCT Report I, ss 29, 56, 57. The traditional knowledge draft text also currently includes a mandatory disclosure of origin requirement for traditional knowledge in IP applications more broadly.

in the design context than the provisions sought in the WIPO IGC. It thus may be unwise for the African Group to exchange agreement on its draft DLT proposal for anything in relation to the WIPO IGC. The two issues – while emanating from similar cultural and genetic resource policy concerns – are separate but related, and one cannot substitute one for the other. This is because, without the policy space to require disclosure of origin for cultural and genetic resource utilisation in industrial design applications, WIPO Members in the IGC would be pre-emptively foreclosed from requiring disclosure of origin for traditional knowledge or genetic resources in design applications before those issues have been fully resolved in that forum.

While policy space for a disclosure of origin requirement for cultural resources might be acceptable for some current opponents of the African Group proposal, many draw the line at allowing policy space for a biological or genetic resource disclosure of origin requirement for designs. 114 This is because the design right generally only protects appearance, not the underlying material from which an article is made. 115 In other words, design protection normally would not prevent a third party from making an article out of any particular material, as long as the protected design is not substantially identically reproduced. For example, an EU RCD covering the appearance of denim jeans designed to appear acid-washed via treatment with the enzyme cellulase does not prevent the enzyme treatment from being used to develop jeans with an appearance different from that shown in the RCD registration. 116 However, as noted above in Section II.A, the EU RCD protects 'the appearance of the whole or a part of a product resulting from the features of, in particular, the . . . texture and/or materials of the product itself and/or its ornamentation'. This language suggests that in some cases the material of construction may be relevant to the scope of protection of the RCD.

In addition, there are valid policy reasons for countries wanting to know

¹¹⁴ See Catherine Saez, 'WIPO Members Urged to Overcome Differences on Disclosure of Origin of Designs' (April 2016) Intell Prop Watch http://www.ip-watch.org/2016/04/26/disclosure-of-origin-of-designs-at-issue-in-potential-wipo-treaty/.

However, as noted above, the EU RCD protects 'the appearance of the whole or a part of a product resulting from the features of, in particular, the . . . texture and/or materials of the product itself and/or its ornamentation'; CDR art 3(a). This language suggests that in some cases, the material of construction may be relevant to the scope of protection of the RCD.

¹¹⁶ See WIPO, 'A Stitch in Time: Smart Use of Intellectual Property by Textile Companies' (2005) 8.

¹¹⁷ CDR, art 3(a).

about the origin of materials used to create protectable designs.¹¹⁸ The following scenario involving illegal uses of biological or genetic resources in design creation provides an apt illustration.

IV. BIOLOGICAL AND GENETIC RESOURCES, ILLEGAL DESIGN CREATION, AND DISCLOSURE REQUIREMENTS

As noted above, the argument against a disclosure of origin requirement for biological or genetic resources in the DLT seems logical in light of the limits of design protection. However, such resources *can* matter in design creation, especially if their use involves illegal activity. Consider the following illustration from the utility patent context:¹¹⁹

Set in eighteenth-century France, author Patrick Suskind's novel Perfume tells the story of Jean-Baptiste Grenouille, a man who, from birth, had no personal body odor, which had the effect of alienating him from others. Lacking a personal scent but having an unusually refined sense of smell, Grenouille, an inventor, became obsessed with developing the perfect perfume that would cause people to adore him. He succeeded in his quest. Unfortunately, his method of creating this compound was to murder young women and extract fragrance compounds from their bodies.

Fast forward to the twenty-first century and imagine that Grenouille seeks a patent on his useful, novel, and nonobvious composition of matter. Should the fact that he murdered people in order to create the invention have any impact on his ability to obtain a patent, or on the enforceability of any patent he does obtain?¹²⁰

Although this is a hypothetical question, a number of countries consider whether illegal or immoral activities contributed to creating inventive subject matter when making utility patent grant decisions. Examples include the *Brüstle v Greenpeace* decision of the Court of Justice of the

¹¹⁸ See for example Paul Kuruk, 'Regulating Access to Traditional Knowledge and Genetic Resources: The Disclosure Requirement as a Strategy to Combat Biopiracy' (2015) 17 San Diego Int'l L J 1, 43 ('Switzerland identified transparency, traceability, technical prior art, and mutual trust as policy specific objectives underlying the disclosure requirement').

This scenario was first used in Margo A Bagley, 'The New Invention Creation Boundary in Patent Law' (2009) 51 WM & Mary L Rev 577. Additional material and concepts from that piece also have been borrowed for this section.

¹²⁰ Ibid 578 (citing Patrick Suskind, *Perfume: The Story of a Murderer* (Penguin 2015)). Special thanks to Doris Walter of the German Patent & Trademark Office for inspiring this hypothetical.

European Union (CJEU), where the destruction of human embryos to create embryonic cell cultures was deemed immoral as violative of the EU Biotechnology Directive, and the invention – the claimed cell culture – was deemed unpatentable despite the fact that it was considered novel and displayed an inventive step. ¹²¹ Similarly, the Third Amendment to the Chinese Patent Act denies patentability to utility patent inventions made with genetic resources acquired in violation of Chinese laws. ¹²² As with *Brüstle*, the invention may be otherwise patentable, but for policy reasons the legislature concluded patent rights were inappropriate.

These same kinds of concerns are relevant for illegal activity in the creation of protectable designs. Consequently, countries should have the policy flexibility to require disclosure of origin for biological or genetic resources. Countries such as China and India choose not to extend patent protection to an invention made using illegally acquired genetic resources even if the invention does not claim the genetic resources per se. ¹²³ Similarly, because industrial design rights allow owners to exclude from the marketplace the *actual products* whose appearance infringes (i.e., appears substantially similar to) the registered design, countries may refuse to extend a right to exclude – under the doctrine of unclean hands or similar reasoning ¹²⁴ – to owners of designs made using illegally acquired or used biological or genetic resource. The imposition of a formal disclosure of origin requirement for design applications could facilitate the identification of relevant 'illegal' designs for such countries.

The design world is bursting with uses of biological or genetic resources to create original designs, from headphones containing 'African padauk wood' panels¹²⁵ to original glassware and other items made from a bioplastic derived from shrimp shells (see Figure 5.6).¹²⁶ Focusing on the

¹²¹ Case C-34/10 Brüstle v Greenpeace eV (2011) ECR I-9849 (ECJ) I-9871.

¹²² Zhonghua Renmin Gongheguo Zhuanli Fa (中华人民共和国专利法) (Patent Law of the People's Republic of China) 2009, art 5.

¹²³ Ibid; see Bagley (n 119) 586 (remarking that countries including China and India 'are changing their laws to deny patentability to inventions created with illegally acquired genetic resources').

¹²⁴ See for example *Precision Instrument Mfg Co v Auto Maint Mach Co* (1945) 324 US 806 (SCOTUS) 814–16 (noting the maxim: 'he who comes into equity must come with clean hands').

¹²⁵ See 'Headphone', Can Indus Design No 124,087 (registered 23 April 2009). The description states: 'The design consists of the features of shape, configuration, pattern and ornamentation of the HEADPHONE shown in the drawings . . . A housing of each headphone unit has [a] solid African padauk wood pattern.'

¹²⁶ See (nn 52–54); see also Biodesign Challenge, 'Materials' http://biodesign.challenge.org/themes/materials/>.



Source: Biodesign Challenge, 'Materials', http://biodesignchallenge.org/themes/materials/>.

Figure 5.6 Bioplastic cups derived from shrimp shells

fashion space, innovative examples abound, including versatile leather substitutes crafted from the yeast and bacteria that produce kombucha, ¹²⁷ or mushroom 'skin' grown under various conditions to create 'leathers' that mimic, and in some cases improve upon, cow, alligator, snakeskin, and other kinds of animal pelts. ¹²⁸ Other examples include genetically engineered silkworms that produce coloured fluorescent silks, ¹²⁹ synthetic biology-based spider silk made without spiders, ¹³⁰ and lab-grown cotton. ¹³¹ Moreover, some creators in the vibrant do-it-yourself synthetic

¹²⁷ Ibid; see Frank (n 18).

¹²⁸ See n 17; see also MyCoworks (n 18). MyCoworks uses a ubiquitous type of mushroom that grows around the world.

¹²⁹ See US Patent (n 54); see also Tetsuya Iizuka et al, 'Colored Fluorescent Silk Made by Transgenic Silkworms' (2013) 23 Advanced Functional Materials 5232, 5237.

¹³⁰ Sarah Buhr, 'Bolt Threads Debuts Its First Product, a \$314 Tie Made from Spiderwebs' (March 2017) TechCrunch https://techcrunch.com/2017/03/10/bolt-threads-debuts-its-first-product-a-314-tie-made-from-spiderwebs/.

¹³¹ See for example Abrahim El Gamal, 'Lab-Grown Leather and Spider

biology community are even offering classes that teach enrollees how to create their own biodesigned materials, including edible wearables.¹³² For examples, see the Kimono Grown from Kambucha¹³³ and the fluorescent silk dress from genetically engineered silkworms.¹³⁴

However, some of the new uses are somewhat disturbing. In June 2016, art school graduate and designer Tina Gorjanc unveiled her critical design show entitled 'Pure Human', featuring a collection of fashion items that theoretically could be made from leather (patent pending) grown from DNA extracted from a hair sample from the deceased designer Alexander McQueen. As reported by the *New York Times*, the flesh-toned biker jackets, totes, and other items comprising the collection bore freckles, tattoos, and other markings strikingly similar to those on McQueen's body. The article asserts that Gorjanc did not obtain permission from anyone associated with McQueen's estate to use his DNA in any way.

The CBD and many national laws do not cover human genetic resources per se; however, the laws of some countries such as China do. 138 Even for

Silk Are the Future of Your Wardrobe' (November 2017) https://massivesci.com/articles/biofabrication-grow-organic-leather-smart-clothing/; Abrahim El Gamal, 'Lab-Grown Leather and Spider Silk Are the Future of Your Wardrobe>; NatureWorks, 'How Ingeo Is Made' (2018) www.natureworksllc.com/Whatis-Ingeo/How-Ingeo-is-Made. NatureWorks is a manufacturer of bioplastics sourced from the long-chain sugar molecules found in corn, cassava, sugar cane, and beets.

- Genspace NYC, 'Biotextiles: Grow Your Own Materials for Fashion Design' (March 2017) EventBrite (select 'view details').
- ¹³³ Suzanne Lee, 'Biocouture Growing Textiles' Design Boom https://www.designboom.com/design/suzanne-lee-biocouture-growing-textiles/>.
 - 134 Iizuka et al (n 129) 5237.
- Elizabeth Paton, 'Fashion That Gets Under the Skin' (July 2016) New York Times www.nytimes.com/2016/07/19/fashion/leather-dna-alexander-mcqueen.html>.
- 136 Ibid. Gorjanc added the tattoos and freckles herself, as the 'grown skin' would not include such markings. Linda Yang, 'The Designer Who Plans to Make Handbags Out of Alexander McQueen's Skin' (July 2016) https://broadly.vice.com/en_us/article/wnww7b/alexander-mcqueen-skin-jacket-handbag?>.
 - ¹³⁷ Paton (n 135).
- 138 See Zhonghua Renmin Gongheguo Zhuanli Fa (中华人民共和国专利法) (Patent Law of the People's Republic of China) 2009, art 5 ('Patent rights shall not be granted for inventions that are accomplished by relying on genetic resources which are obtained or used in violation of the provisions of laws and administrative regulations'); see also Zhonghua Renmin Gongheguo Zhuanli Fa Shishi Xize (中国人民共和国专利法实施细则) (Implementing Regulations of the Patent Law

those that do not, a use such as the one theorised by Gorjanc may still be problematic if, for example, informed consent from the relevant human being was not obtained. Even though Gorjanc apparently was attempting to highlight moral and ethical issues at the intersection of biotechnology, IP, and fashion with her work, the use of McQueen's DNA without consent would raise ethical concerns that a country could begin to address in national law with a disclosure of origin requirement as a compliance-facilitating mechanism.¹³⁹

The global market for plant-based innovation and associated products is growing rapidly and includes plant-derived pharmaceuticals, fibres, textiles, cosmetics and, as noted above, fashionable clothing and accessories. 140 As such, the use of biological or genetic resources in the design and manufacture of goods is indisputably an important element of global trade. Companies engaged in innovative product development are increasingly looking for environmentally friendly product components and alluring product designs. 141 This trend emphasises the use of plant-based material and thus increases the likelihood of biological or genetic resources being used in products that may ultimately be the subject of design protection. 142

To be clear, many of these inventions are significant technological

of the People's Republic of China) 2003, art 26 ('The genetic resources referred to in the Patent Law means any material taken from *human*, animal, plant or microorganism, containing genetically functioning units with actual or potential value').

¹³⁹ Paton (n 135).

¹⁴⁰ See for example Jian Yao, Yunqi Weng, Alexia Dickey, Kevin Yueju Wang, 'Plants as Factories for Human Pharmaceuticals: Applications and Challenges' (2015) 16 Int'L J Molecular Sci 28549, 28550; Paton (n 135).

¹⁴¹ See Michael Hozik, 'Making the Green by Going Green: Increased Demand for Green Products and the FTC's Role in a Greener Future' (2016) Geo Envt L Rev https://geir.org/2016/02/01/ ('[A] rapid expansion in green-conscious customers has spurred a surge of companies making green claims, sparking gridlock at the United States Patent and Trademark Office. Between 2006 and 2007, filings for eco-friendly labels doubled and stores offered 73% more green products in 2010 compared to 2009').

¹⁴² See for example American Chemical Society, 'Going Green with Plant-Based Resins' (August 2017) https://www.acs.org/content/acs/en/pressroom/ presspacs/2017/acs-presspac-august-16-2017/going-green-with-plant-based-resins. html>. As Boateng notes: 'The marginalization and appropriation of indigenous cultural products, be they medicinal plants or fabric designs, relegates them to the status of raw materials, rather than artistic and scientific goods in their own right. This leaves them open to appropriation – often by groups and individuals who then claim ownership of their appropriations by recourse to intellectual property law.' University of Minnesota Press, 'Examining Ghana's Use of Intellectual Property Law to Protect Adinkra and Kente Fabrics' (April 2017) https://www.uminnpress blog.com/2011/04/examining-ghanas-use-of-intellectual.html>.

advances, far removed from the raw starting materials used in their development. However, that does not necessarily remove them from the purview of national laws relating to biological and genetic resources or from ABS obligations. Rather, such changes in the raw materials may simply affect the *amount* of benefits to be shared, not the fact that benefits *are* to be shared. Moreover, it would be erroneous to assume that just because one is using a plant – and not traditional knowledge – there is no relevant indigenous contribution in relation to the plant. Many indigenous groups have been modifying and interacting with the natural environment for millennia in ways that protect, conserve and possibly improve the quality of medicinal and other plants. Such efforts include developing and imposing strict harvesting protocols for medicinal plants, imposing boundaries to protect herb growth areas, and more. 144

To the extent misappropriation of cultural and genetic resources is viewed as a form of theft, it implicates notions of morality, as theft is widely considered morally wrong. ¹⁴⁵ Interestingly, morality-tinged concerns are not foreign to design applications. For example, section 1504.01(e) of the US Patent and Trademark Office's *Manual of Patent Examining Procedure* states: 'Design applications which disclose subject matter which could be deemed offensive to any race, religion, sex, ethnic group, or nationality, such as those which include caricatures or depictions, should be rejected as nonstatutory subject matter under 35 U.S.C. 171.'¹⁴⁶ This provision does not implicate a disclosure of origin requirement but it does evidence a governmental concern in relation to design rights that is distinct from whether the design is sufficiently ornamental, novel or inventive to be

This is not a new concept to IP, as copyright vests the right to make derivative works, be they songs or other writings, in the creator of the original work, a work that itself may evidence only a modicum of creativity and originality. See 17 USC (2012), ss 102–03; *Feist Publ'ns Inc v Rural Tel Serv Co* (1991) 499 US 340 (SCOTUS) 345.

¹⁴⁴ See Mohamed Khalil, 'Biodiversity and the Conservation of Medicinal Plants: Issues from the Perspective of the Developing World' in Timothy M Swanson (ed), *Intellectual Property Rights and Biodiversity Conservation: An Interdisciplinary Analysis of the Values of Medicinal Plants* (Cambridge 1995) 232, 242–43. Chidi Oguamanam, 'Between Reality and Rhetoric: The Epistemic Schism in the Recognition of Traditional Medicine in International Law' (2003) 16 St Thomas L Rev 59, 74–75.

¹⁴⁵ See Margo A. Bagley, The Morality of Compulsory Licensing as an Access to Medicines Tool (2018) 102 Minn L Rev 2463 (describing the use of theft rhetoric as a proxy for morality in US intellectual property cases).

¹⁴⁶ USPTO Manual, s 1504.01(e); Cf *Matal v Tam* (2017) 137 S Ct 1744 (SCOTUS) 1751 (striking down a law denying trade mark protection to disparaging marks).

eligible to receive protection. However, morality can be subjective, and views of what is moral can change – often fluidly – over time, complicating legal certainty if design protection is forfeited by immoral activity. If, instead of employing a possibly vague morality provision, a country chooses to deny design protection to subject matter made through activity declared illegal under national law, applicants seeking design protection should have sufficient legal certainty to be able to govern their actions accordingly.¹⁴⁷

In *Brüstle v Greenpeace*, the CJEU clarified that the EU Biotechnology Directive barred the patenting of inventions involving the destruction of human embryos at any point in the making of the invention. In other words, even if an immoral activity took place early in the invention-creation process and did not explicitly appear in the claims, that still could be a basis for invalidating the patent. One commentator, recognising the logical implications of the decision, noted that it 'could be relied on . . . to oppose the issuance, or challenge the validity, of patents covering any inventions *obtained through illegal activities*, including *biotech inventions reached through the misappropriation of genetic resources*'. In Indian India

Thus, there is precedent in the utility patent context for assessing whether and to what extent patent protection should be available for subject matter deriving from illegal activity. The underlying concern is that there are activities that a government deems illegal that are rewarded downstream by an IP right. Industrial design rights are different from utility patent rights but these same concerns about rewarding illegal activity are quite applicable to this form of protection.

A. Formality Versus Substance

During the 34th session of the WIPO SCT, the African Group noted that the draft DLT had been compared to the PLT as a 'formalities' treaty¹⁵⁰ but that the comparison has important limits. For example, unlike the draft DLT, the PLT does not prevent contracting states from requiring disclosure of information in applications. In this way, the DLT ventures much further into substantive territory than the PLT. The PLT, however, does 'limit the form and content of applications to be no more [than] as

See also discussion below regard *ordre public*.

¹⁴⁸ See Case C-34/10 *Brüstle v Greenpeace eV* (2011) ECR I-9849 (ECJ) I-98719875.

¹⁴⁹ Enrico Bonadio, 'Stem Cells Industry and Beyond: What Is the Aftermath of Brüstle?' (2012) 1 Eur J Risk Reg 93, 97 (emphasis added).

¹⁵⁰ SCT Report I, s 29.

required under the [Patent Cooperation Treaty] PCT'.¹⁵¹ But the PLT states explicitly in Article 2 that '[n]othing in this Treaty or the Regulations is intended to be construed as prescribing anything that would limit the freedom of a Contracting Party to prescribe such requirements of the applicable substantive law relating to patents as it desires'.¹⁵²

The African Group noted that the draft DLT contained no such explicit recognition of its formal limitations, which compounds the concerns regarding the closed list in Article 3. In response to this concern, and in an effort to find a compromise solution, the WIPO SCT Chairman introduced an amendment during the 34th session of the WIPO SCT consisting of a new Article 1*bis* based on language from the PCT and PLT, which specified that nothing in the DLT was intended to prevent a country from prescribing substantive law requirements relating to industrial designs. Thus, proponents could only require disclosure of origin in national law as a substantive condition of design protection and registrability.

On the surface, this appears appealing to both sides: the DLT could move forward and countries would have the ability to require disclosure of origin as a substantive condition of design protection. In isolation, however, this approach is problematic.¹⁵⁴ As a substantive requirement, failure to comply with the disclosure of origin could result in imposition of some of the harshest penalties in IP, such as revocation of the design right. The availability of revocation as a penalty for non-disclosure is one of the key controversial issues in WIPO IGC discussions regarding a mandatory disclosure of origin provision for genetic resources and associated traditional knowledge, and many countries currently opposing the African Group proposal are the same countries opposing revocation as a penalty for disclosure of origin violations in the WIPO IGC discussions.¹⁵⁵

¹⁵¹ Ibid.

 $^{^{152}\,\,}$ Patent Law Treaty (adopted 1 June 2000) 2340 UNTS 3, art 2 (Patent Law Treaty).

¹⁵³ SCT Report I, s 82.

Such a provision is an important addition to the DLT and is consistent with similar provisions in the Patent Law Treaty (n 152) and Patent Cooperation Treaty (adopted 19 June 1970) 28 UST 7645 (Patent Cooperation Treaty), for example. See Patent Law Treaty (n 152), art 6; Patent Cooperation Treaty, art 27. However, it is not sufficient to allow policy space for formal disclosure of origin requirements. See Nuno Pires de Carvalho, 'Requiring Disclosure of the Origin of Genetic Resources and Prior Informed Consent in Patent Applications Without Infringing the TRIPS Agreement: The Problem and the Solution' (2000) 2 Wash U JL & Pol'y 371, 389.

¹⁵⁵ See WIPO, 'Summary of Replies to the Questionnaires (Parts I and II) on Industrial Design Law and Practice (2008) SCT/18/7 and SCT/18/8 REV (2008) WIPO/STrad/INF/2 Rev1 59–60.

Thus, it seems contrary to the stated interests of such countries to support disclosure of origin as a substantive requirement for design protection.

However, as a formality, facial non-compliance with a disclosure of origin requirement should only result in a cessation of further processing of the design application. If the requirement was facially met and after the design was registered it was shown that the applicant had lied about the origin of the design, the design right need not be revoked. Instead, the applicant or rights holder could be punished outside of the design system, such as in an action for perjury (which could be a fine or another penalty). ¹⁵⁶

If the goal of a disclosure of origin requirement is to facilitate transparency regarding improper or unauthorised uses of cultural or genetic resources, its categorisation as a formal requirement seems appropriate. It makes sense that the harsher remedy of revocation should be available, if at all, only for violation of the underlying law regarding use of the resources without consent or benefit sharing. Thus, if the parties to the DLT rely solely on proposed Article 1*bis* for policy space for disclosure of origin requirements, they would be – albeit unintentionally – channelling such requirements to substantive provisions in national laws.

A formal disclosure of origin requirement may seem pointless for the many design protection regimes employing a formalities-only examination before a design is registered. With no substantive examination for novelty, the disclosed information would not be used by an examiner to assess whether protection should be granted. Nevertheless, a disclosure of origin requirement could still be beneficial in several ways. Importantly, it could have a deterrent effect on would-be applicants who know they have misappropriated a design. In addition, if an applicant truthfully discloses origin, that could make it easier for the IP office or court to assess the validity of any post-grant challenge to the registration. Moreover, if an applicant misrepresents the origin and obtains a registration, he or she could be subject to various penalties under domestic law if the falsehood is later uncovered.

Concern regarding how a disclosure of origin regime might be implemented in a domestic design system has fuelled some countries' resistance

¹⁵⁶ Imposing fines is the approach taken by Switzerland with regard to violations of the disclosure of origin requirement for utility patent applications. See Delegation of Switzerland, 'The Declaration of the Source of Genetic Resources and Traditional Knowledge in the Swiss Patent Act and Related Swiss Regulations on Genetic Resources – Submission by Switzerland in Response to Document WIPO/GRTKF/IC/30/9' (2016) WIPO/GRTKF/IC/31/8.

to the African Group proposal.¹⁵⁷ While a discussion of the optimal structure of a domestic design disclosure of origin regime for countries choosing to employ such a requirement is beyond the scope of this chapter, there are elements that, if adopted, might alleviate some of the concerns of opponents of the African Group proposal.

One such element could be linking domestic traditional knowledge or traditional cultural expression registries, such as those provided for by the Swakopmund Protocol, and domestic disclosure of origin design application requirements. Such registries, to the extent they provide domestic protection for registered subject matter (somewhat akin to a geographical indications registry), could enhance certainty by enabling challenges to be based on registered, publicly available works. However, such registries may be detrimental to the extent they deny protection to those who need it most: indigenous peoples and local communities who may be unaware of or have easy access to the registries, or may lack the financial wherewithal to register their cultural information. Such registries also would be problematic for holders or owners of cultural resources that are not suitable for inclusion in a registry due to secrecy or other reasons. In addition, imposing a requirement of registration prior to bringing a challenge might help to some extent, but many issues still would need to be addressed to develop a system that effectively balances legal certainty with justice and fairness for owners and creators of cultural and genetic resources.

B. The Cost of Protection

As noted above, design protection in many countries is relatively inexpensive to obtain, certainly relative to utility patent protection. Yet the low cost for the design rights holder can impose a very high cost on the public. This is because it may be easy to obtain a design right that should never have been granted, and that will be expensive to invalidate in court or even in an administrative action.¹⁵⁸

The WIPO statistics on the increasing numbers of design filings indicate we can expect a concomitant rise, over time, in litigation involving enforcement of design rights. ¹⁵⁹ As Jason DuMont and Mark Janis note,

See for example SCT Report I (n 77), s 21.

See Burstein (n 6) 109, 125, 128 (describing the costs of bad design patents).

United States Patent and Trademark Office, 'The Drastic Rise in Patent Litigation (2000–2015) https://www.uspto.gov/learning-and-resources/ip-policy/economic-research/drastic-rise-patent-litigation-2000-2015.

'application-filing trends suggest that intellectual property litigation over designs will become increasingly common worldwide'. 160

The impact on competition can be especially devastating to indigenous peoples and local communities seeking access to foreign markets (such as the European Union and the United States) for their wares, who may find such access blocked by design rights. It is important to note that 'traditional' knowledge is not necessarily 'old' knowledge. The word 'traditional' in this context refers to the fact that the knowledge was created or evolved in a communal context, in other words, the *way* it was created, not its age. ¹⁶¹

The costs to competition of design protection can be quite significant. In fact, legislators in Turkey recently approved exceptions to design protection rights for automobile spare parts replaced by insurers. Moreover, members of the US Congress recently reintroduced the Promoting Automotive Repair, Trade, and Sales Act of 2017 (PARTS Act) over similar concerns. He PARTS Act targets the use by original equipment manufacturers of design patents to prevent competitors from offering fairly standard replacement parts (i.e., bumpers, side mirrors, and light fixtures) for sale during the full term of the design patent, which often exceeds the time period the automobile owner retains the vehicle. He PARTS Act would limit the enforcement period (only as against alternative replacement parts suppliers) for design patents on external automobile replacement parts from the normal 15-year term to 30 months from the first day the part is offered for public sale. Whether the PARTS Act will become law and, if so, in what final form is unknown, but the

¹⁶⁰ Du Mont and Janis (n 2) 839.

¹⁶¹ See Ulia Popova-Gosart (ed), *Traditional Knowledge & Indigenous Peoples* (Information & Education Network of Indigenous Peoples 2009).

¹⁶² See Işik Özdoğan and Ezgi Baklaci, 'Spare Parts: Exceptions to Design Rights Protection' (June 2017) WIPR https://www.worldipreview.com/contributed-article/spare-parts-exceptions-to-design-rights-protection; Asia Insurance Review, 'Turkey: Use of Equivalent Auto Parts to Help Cost Control' (March 2017) http://www3.asiainsurancereview.com/News/View-NewsLetter-Article?id=38556&Type=MiddleEast.

Promoting Automative Repair, Trade, and Sales Act 2017 (United States); John Huetter, 'Aftermarket-Centered PARTS Act Back for New Congress' (April 2017) Repairer Driven News http://www.repairerdrivennews.com/2017/04/05/aftermarket-centered-parts-act-back-for-new-congress.

¹⁶⁴ Huetter (n 163).

David Rood, 'Is Congress Finally Getting Serious About Curtailing Design Patents in the Auto Industry?' (June 2017) Foley & Lardner https://www.autoindustry/ design-patents-in-the-auto-industry/>.

bipartisan support for the bill and its reintroduction suggests the issue is one that is worthy of attention.

Disclosure requirements already play various roles in the IP system. For example, Article 29 of TRIPS mandates that members require applicants to disclose an invention in a patent application in a particular manner that would justify, on a quid pro quo basis, the grant of an exclusive right as being in the best interests of society. Gibbs Similarly, allowing countries to require disclosure of origin in the proposed DLT enables countries to ensure that the grant of a design right is consistent with a range of policy objectives, including protecting and promoting indigenous innovation and conservation. As such, a disclosure requirement is similar to other policy-based limitations on design rights. For example, Article 6(2) of the Canadian Industrial Design Act mandates the rejection of designs that are 'contrary to public morality or order'. Similarly, Article 9 of the EC Design Regulation states that '[a] Community design shall not subsist in a design which is contrary to public policy or to accepted principles of morality'. 168

It is also worth noting the DLT is being negotiated in the WIPO SCT. 'Origin' is a fundamental concept and requirement in relation to both trade marks and geographical indications. Trade marks receive protection only if they serve as accurate indicators of source or origin. ¹⁶⁹ Likewise, the whole basis of protection for geographical indications is that the origin of the product, as well as the techniques and practices employed by the artisans in that locale, renders it sufficiently distinctive to be accorded protection. ¹⁷⁰ It thus makes sense that origin should be recognised as a factor worthy of consideration in relation to the remaining subject matter area of the WIPO SCT – industrial designs.

Finally, what a country does with information gleaned from a disclosure of origin requirement, whether formal or substantive, is a matter of national law in the same way that Article 3 of the draft DLT allows individual nations to determine how other information they gather should be used. Disclosure reveals information that can be used for multiple purposes, and the particular use may not be specified *ex ante*. Thus, the uses to which a country puts information gleaned from a design application disclosure of origin requirement should be irrelevant to the question

¹⁶⁶ TRIPS (n 38) art 29.

¹⁶⁷ Industrial Design Act 1985 (Canada), s 7(e).

¹⁶⁸ CDR, art 9.

See for example The Lanham Act (United States), s 1127.

¹⁷⁰ See WIPO, 'Geographical Indications' http://www.wipo.int/geo_indications/en/

of whether a formalities treaty like the DLT should prevent the imposition of such a requirement in the first instance.

V. CONCLUSION

The African Group proposal reflects concerns about justice, fairness and governments' commitments to protect certain resources and values. This creates tension as the IP system often has been isolated from these kinds of concerns. The issue of misappropriation has moral overtones as it relates to theft, and the public policy goals of national laws in this area may be undermined by a government's inability to track the unlawful dispersion of its resources. A properly constructed disclosure of origin requirement can enhance transparency and facilitate information gathering without overly burdening applicants or IP offices.

Given the importance of this issue to several WIPO Members, it seems necessary for any final DLT to contain clear policy space for countries to require disclosure of origin for cultural and genetic resources. ¹⁷¹ If the references to disclosure of source or origin for traditional knowledge, traditional cultural expression, and genetic resources are removed and replaced with more nebulous language, that could indicate to legislators, judges, scholars and others who will interpret the treaty in the future that such a disclosure requirement is not allowed. Such policymakers may look to the 'travaux préparatoires', the official record of the DLT negotiation, to determine how its provisions should be interpreted. ¹⁷² The fact that specific language allowing countries to require DOO in design applications appeared in the draft document for several years and then was removed could suggest that the requirement was considered and rejected.

An 'agreed statement' in conjunction with the DLT is another possible compromise tool for allowing countries to employ a disclosure of origin requirement. See for example WIPO, 'Agreed Statements Concerning WIPO Performances and Phonograms Treaty' http://www.wipo.int/treaties/en/text.jsp?file id=295690>.

The traveaux préparatoires and negotiating history is, in accordance with art 32 of the Vienna Convention, only relevant once a full interpretation of ordinary meaning, in context and in light of object and purpose, has been completed under art 31, and then the role of this 'supplementary' material is to confirm that meaning or resolve and ambiguity (Vienna Convention on the Law of Treaties (opened for signature 23 May 1969, entered into force 27 January 1980) 1155 UNTS 331 (VCLT) arts 31–32). For a review of treaty interpretation in the context of international IP, see Susy Frankel, 'The WTO's Application of "the Customary Rules of Interpretation of Public International Law" to Intellectual Property' (2006) 46 Va J Int'l L 365.

This is especially likely in view of the statements on the record by some delegations that a disclosure of origin requirement should not be allowed in design applications.¹⁷³

As the examples described above illustrate, valid concerns attest to the reasonableness of countries desiring transparency regarding the use of such resources in the development of articles protected by industrial design rights. As technology continues to evolve and policy implications crystallise, countries will continue to need space to frame their laws in ways that will appropriately reward the innovation process, while adequately respecting cultural and genetic resource appropriation concerns.

¹⁷³ SCT Report I (n 77).