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Kelvin FK Low* & Jolene Lin**

ABSTRACT

While there have been many legal studies of the European Union Emissions Trading Scheme, few have considered the effectiveness of the EU ETS as a matter of private law design. The authors propose to do so by tracing the history of the scheme, studying the English decision of *Armstrong DLW GmbH v Winnington Networks Ltd* [2012] EWHC 10 (Ch), [2013] Ch 156, as well as analysing the new EU Registry Regulations promulgated since then. We conclude that the EU ETS is handicapped by conceptual failings and exposes participants to unnecessary uncertainty that national courts will find difficult to resolve.

KEYWORDS: carbon credits, property, registry, fraud

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1. INTRODUCTION

The first and the largest regional greenhouse gas (GHG) emissions trading scheme in the world, the European Union Emissions Trading Scheme (EU ETS) is widely considered to be the central pillar of the EU's comprehensive package of laws and policies addressing climate change – the European Climate Change Programme (ECCP).¹ Whilst its objectives are laudable, the implementation of the EU ETS has

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¹ Europa, Commission of the EU, 'European Climate Change Programme' <ec.europa.eu/clima/policies/eccp/index_en.htm> accessed 20 February 2015. For discussion, see Tim Maxian Rusche, 'The European climate change program: An evaluation of stakeholder involvement and policy achievements' (2010) 38 Energy Policy 6349. The ECCP has facilitated the adoption of numerous directives for promoting renewable energy, biofuels, recovering methane from biodegradable waste in landfills, amongst others; Council Directive (EC) 2001/77 of 27 September 2001 on the promotion of electricity produced from renewable energy sources in the internal electricity market [2001] OJ L283/33; Council Directive (EC) 2003/30 of 8 May 2003 on the promotion of the use of biofuels or other renewable fuels for

been beset with complications.² Although many of these problems are extra-legal, this article posits that one of the critical failures in the EU ETS lies in its failure to properly define the fundamental legal nature of an allowance (an EUA) under the scheme. Ostensibly, this omission is a concession to the principle of subsidiarity.³ However, we suggest that it stems also from a failure to appreciate the legal nature of intangible property as well as a misunderstanding of the way in which registers of rights operate. Whereas some of the extra-legal failings of the system have been mended following amendments implemented after the project entered its third phase,⁴ it will be seen that some of these changes have actually exacerbated the legal failings of the EU ETS.

Part 2 of this article will set the stage by introducing the context in which the EU ETS came to be set up as well as present the problems we are concerned with in the abstract. These are essentially private law disputes involving participants in the EU ETS. Part 3 will study one of these problems through a case study of *Armstrong DLW GmbH v Winnington Networks Ltd (Armstrong v Winnington)*,⁵ to date the only case that seeks to tackle the difficult question of the legal nature of an EUA. Part 4 will then critically examine the new rules governing the EU ETS that have been enacted following *Armstrong v Winnington* and explain how they exacerbate the problems caused by the ambiguity of the legal nature of an EUA.

2. SETTING THE STAGE

There are two main types of emissions trading programs – ‘cap-and-trade’ and ‘baseline credit’ systems.⁶ The EU ETS is built on the ‘cap and trade’ model. In a

transport [2003] OJ L123/42; Council Directive (EC) 1999/31 of 26 April 1999 on the landfill of waste [1999] OJ L182/1.

² See, eg, Marius-Christian Frunza, *Fraud and Carbon Markets: The Carbon Connection* (Routledge 2013).

³ For a general study of the principle of subsidiarity and environmental policy, see Jonathan Golub, ‘Sovereignty and Subsidiarity in EU Environmental Policy’ (1996) 44 *Political Studies* 686.

⁴ Peter Zaman, ‘The new Registries Regulation – form over substance?’ (*ReedSmith*, 1 October 2012) <www.reedsmith.com/The-new-Registries-Regulation--form-over-substance-10-17-2012/> accessed 20 February 2015

⁵ [2012] EWHC 10 (Ch), [2013] Ch 156.

⁶ R Kerry Turner, David Pearce and Ian Bateman *Environmental Economics: An Elementary Introduction* (John Hopkins University Press 1993) 181. There is a voluminous literature on emissions trading. See, generally, OECD, ‘Implementing Domestic Tradable Permits for Environmental Protection’ (OECD 1999); Joseph Kruger, ‘Companies and Regulators in Emissions Trading Programs’ (Resources for the Future, 2005) Discussion Paper 05-03; European Environment Agency, ‘Using the Market for Cost-Effective Environmental Policy’ (EEA, 2006); Robert W Hahn and Gordon L Hester, ‘Where did all the markets go? An Analysis of EPA’s Emissions Trading Program’ (1989) 6 *Yale Journal on Regulation* 109.

cap and trade scheme, the regulator determines an acceptable level of emissions, i.e. a 'cap'. In order for the scheme to achieve the objective of reducing emissions, the cap has to be set at a level that is lower than 'business as usual' emissions levels. Once the cap is established, allowances that permit the emission of GHGs will be allocated amongst firms. Thus, within the EU ETS, the subject of regulation is the installation emitting GHGs into the atmosphere. Each installation is allocated a specific amount of tradable allowances (EUAs) for a certain trading period. Each installation is required to annually monitor, measure and report its emissions and surrender an amount of EUAs equivalent to its emissions in the preceding year.

A firm that wishes to emit more than its allocation of EUAs has to purchase additional allowances. Otherwise, it will exceed its quota and thereby incur tough monetary penalties.⁷ Trading is premised on the assumption that firms are economically rational profit-maximising actors: a firm that can abate pollution at a cost lower than the market price of an allowance will do so up to the level where the price of abatement is equal to the allowance price. It then sells its surplus allowances to firms that find it more costly to reduce pollution than to buy allowances to meet emission targets. Cost-effectiveness is achieved when all firms abate to the point where the marginal costs of further abatement is equal to the permit price. The long-term goal of a cap and trade system is to reduce total emissions to a level below that established by the cap.⁸ This can be achieved by gradually reducing the level of emissions represented by the 'cap'.

2.1 PHASED DEVELOPMENT OF THE EU ETS

The European Commission put forward the idea of a community-wide emissions trading scheme as early as 1999.⁹ The details of the scheme were finalized in October 2003 and the EU ETS came into operation on 1 January 2005.¹⁰ The EU ETS was designed to develop in phases.¹¹ The first phase was from 2005 to 2007; the second phase from 2008-2012 and the current third phase started on 1

⁷ The installation will have to purchase allowances to make up the shortfall in addition to paying a penalty of 100 Euro per tonne of carbon dioxide equivalent. In *Billerud Karlsborg v Naturvårdsverket* (C203/12, 17 October 2013), the European Court of Justice ruled in 2013 that Member States must impose these penalties, even when there was no intention to circumvent the rules.

⁸ Turner, Pearce and Bateman (n 6) 183.

⁹ Commission, 'Preparing for Implementation of the Kyoto Protocol' (Communication) COM (99) 230 final, 19 May 1999.

¹⁰ Council Directive (EC) 2003/87 of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC [2003] OJ L275/32. [EU ETS Directive]

¹¹ Art 30(2) of the EU ETS Directive stipulates that the Commission is to prepare reports and proposals to include more activities and cover more greenhouse gases within the EU ETS over time.

January 2013 and will run till 2020. In the first phase, the EU ETS already regulated approximately five thousand economic operators responsible for around twelve thousand installations in four sectors: energy (including electricity producers), ferrous metals (iron and steel), minerals (cement, glass, ceramics) and pulp and paper.¹² However, it should be noted that while the number of installations involved in the EU ETS appears large, there is merely a handful of participants engaging in spot-market transactions.¹³ These participants are predominantly energy companies.¹⁴ Nonetheless, when it was first launched, the EU ETS already covered half of all carbon dioxide emissions in the EU.¹⁵ In the current phase, the EU ETS has been enlarged to include new sectors such as aviation and the overall target is to reduce GHG emissions by 20% from 1990 levels.

2.2 THE 'COMMUNITY INDEPENDENT TRANSACTION LOG'

In order to have a system of tradable allowances, member states allocate allowances to economic entities and establish electronic registries in which these allowances are held.¹⁶ The Commission maintains oversight of the distribution of allowances. The 'Community Independent Transaction Log' (CITL) was a system used to oversee the national registries by monitoring transactions for irregularities. Carlarne describes the CITL as such: '[t]he system resembles bank operations except that instead of monitoring the movement and ownership of money, it monitors the ownership and movement of emission allowances'.¹⁷ With the unification of the national registries in the current third phase of the scheme, the CITL has been replaced by the 'European Union Transaction Log' (EUTL).

2.3 WHAT IS AN EUA?

¹² Annex I, EU ETS Directive.

¹³ In the years 2005-2006, just three operators accounted for more than ten percent of all spot-market transactions and another eight accounted for the next twenty percent of the market: Stefan E Weishaar and Edwin Woerdman, 'Auctioning EU ETS allowances: An assessment of market manipulation from the perspective of Law and Economics' (2012) 3 *Climate Law* 247.

¹⁴ *ibid.*

¹⁵ A Denny Ellerman and Barbara K Buchner, 'The European Union Emissions Trading Scheme: Origins, Allocation, and Early Results' (2007) 1 *Review of Environmental Economics and Policy* 66.

¹⁶ In the first phase, Member States were responsible for creating 'National Allocation Plans' which indicated the amount of allowances that each Member State proposed to allocate and the method of allocating the allowances amongst the companies that were emitting greenhouse gases. However, due to problems of non-transparency and the over-allocation of allowances by states, the rules have been changed. In the current phase (2013-2020), there is a single EU-wide allowance cap and the Commission laid down harmonized rules for allocation of allowances.

¹⁷ Cinnamon Pinon Carlarne, *Climate Change Law and Policy: EU and US Approaches* (OUP 2010) 172.

Apart from defining 'allowance' in Article 3, the EU ETS Directive was silent as to the legal nature of the EUA. Article 3 of the directive defines an allowance as 'an allowance to emit one tonne of carbon dioxide equivalent during a specified period, which shall be valid only for the purposes of meeting the requirements of this Directive and shall be transferable in accordance with the provisions of this Directive'.

An early draft proposal of the EU ETS Directive defined an 'allowance' as an 'administrative authorization', a definition that is common in US emissions trading schemes such as the sulphur dioxide emissions trading scheme set up under the Clean Air Act of 1990.¹⁸ However, the Legal Service of the European Commission rejected this definition of an 'allowance' as it was perceived to be in conflict with the principle of subsidiarity.¹⁹ Therefore, it is up to each Member State to define the EUA's legal status. A holder of EUAs 'will have to turn to domestic legislation and judicial precedents to find out the level of legal authorization, ownership, obligations, liabilities, and/or protection provided for under domestic law for any kind of EUA-related activity in any given legal context (such as contract, property, security, insolvency, state aid, accounting, or tax law)'.²⁰ The rejection of the dubious definition found in the US Clean Air Act is probably a blessing in hindsight. Section 403(f) has been criticized as being 'premised on the confusion between property rights in something and the thing itself. It provides that an emissions allowance is not "a property right" but expressly recognizes property rights in emission allowances'."²¹ The 'definition' was intended to avoid subsequent legislative amendments to the scheme being treated as a taking under the Fifth Amendment of the US Constitution.²² While the objective is laudable and there is in principle to be no objection to the idea of defeasible property,²³ it seems unlikely that a simple definitional exclusion of property status by Congress would have the effect of excluding the operation of the Fifth Amendment by itself.²⁴ Whilst this frees the

¹⁸ Section 403(f) Clean Air Act (42 USC 7651b).

¹⁹ Markus Pohlmann, 'The European Union Emissions Trading Scheme' in David Freestone and Charlotte Streck (eds), *Legal Aspects of Carbon Trading* (OUP 2009) 350.

²⁰ *ibid* 351.

²¹ Daniel H Cole, 'Cleaning the Air: Four Propositions About Property Rights and Environmental Protection' (1999) 10 *Duke Environmental Law & Policy Forum* 103, 113-114.

²² Markus W Gehring and Charlotte Streck, 'Emissions Trading: Lessons From SO_x and NO_x Emissions Allowance and Credit Systems Legal Nature, Title, Transfer, and Taxation of Emission Allowances and Credits' (2005) 35 *Environmental Law Reporter* 10220, 10221-10222.

²³ Cole (n 21) 114-115.

²⁴ *City of Boerne v Flores*, 521 US 507, 117 S Ct 2157 (1997), especially at 2164: 'Congress does not enforce a constitutional right by changing what the right is. It has been given the power "to enforce," not the power to determine what constitutes a constitutional violation.'

various national courts in the EU to call a spade a spade, the classification of carbon credits as property²⁵ does not begin to provide clear answers to a multitude of questions. Refusing to clarify the legal nature of EUAs on account of the principle of subsidiarity, it will be seen, leaves much to be desired.

First, since EUAs are intended to be traded across member states, the lack of a uniform legal nature across member states is, at the very least, curious. This is not the same objection as the more familiar criticism that EUAs do not enjoy a uniform legal *status* across member states. Different jurisdictions regulate trading differently depending on their classification of EUAs as either financial instruments or as commodities. EUAs also attract different accounting and tax treatments across member states. While discrepancies in *status* may hinder cross border trades of EUAs, differing views of EUAs' legal nature, such as whether they are regarded as property for the purposes of regulatory takings, what amounts to an interference with an EUA and how competing claims to the same EUAs are resolved, would pose far more serious obstacles to such trade. It is important to note the differences between property rights in tangible things and intangible property in this respect. People buy cars so they may use them and the rights afforded by legal systems to owners secure their usage but the car is quite separable from the legal rights to it. Intangible property, on the other hand, is inseparable from the legal rights created by a legal system for the right itself *is* the property. Thus, whilst it may be a matter of some inconvenience to an owner driving from England to France that his legal rights to his car will be protected differently in France as compared to England, the car itself does not fundamentally change in nature at the border crossing. If, however, the right is the thing itself and the precise rights change upon transfer across borders, this would reflect an entirely different phenomenon altogether. Such a phenomenon, whilst not impossible to contemplate, has certainly never been encountered before the establishment of the EU ETS. Intellectual property rights, for example, *never* cross borders. Greek copyright is a quite distinct construct from Italian copyright and while an Italian company may acquire a Greek copyright, the right itself does not 'move' to Italy. Contractual choses in action, even if traded across borders, remain fundamentally governed by their proper law so far as enforcement is concerned. The proper law of a contract may be changed but only by the consent of the parties to the contract, not by the right changing hands. A chameleonic intangible property capable of crossing borders thus presents problems never before encountered and from which no proper analogy may be drawn.

Secondly, unless a Member State enacts legislation clarifying the legal nature of EUAs, users of the EU ETS are left in a state of legal limbo. This would not be the first occasion in which the Community legislature has created poorly-defined 'rights'. In the context of EU milk quotas, Advocate General Colomer opined that '[t]he Community legislature must have believed that it could simply regulate these instruments according to their purpose, namely to control milk production within

²⁵ *Armstrong v Winnington* (n 5) [31].

the Community, and leave it to each Member State to resolve the complex private-law issues which the introduction of the new scheme would inevitably raise.²⁶ The problem with such an approach to the design of the EU ETS is that, unlike milk quotas, which were primarily designed as a means of production control but evolved through market practice into tradeable assets, EUAs were primarily designed as a means of emission control *through a trading system*. According to INTERPOL, 'carbon credits [are] poorly understood by many sellers, buyers and traders. This lack of understanding makes carbon trading particularly vulnerable to fraud and other illegal activity. Carbon markets, like other financial markets, are also at risk of exploitation by criminals due to the large amount of money invested, the immaturity of the regulations and lack of oversight and transparency.'²⁷ The illegal activities identified by INTERPOL include:²⁸

- (i) Fraudulent manipulation of measurements to claim more carbon credits from a project than were actually obtained;
- (ii) Sale of carbon credits that either do not exist or belong to someone else;
- (iii) False or misleading claims with respect to the environmental or financial benefits of carbon market investments;
- (iv) Exploitation of weak regulations in the carbon market to commit financial crimes, such as money laundering, securities fraud or tax fraud; and
- (v) Computer hacking/phishing to steal carbon credits and theft of personal information.

Without clarity as to the precise rights that attach to an EUA, including how one's ownership of an EUA is protected from divestment, whether by fraud or otherwise, market participants can only guess at how the 'complex private-law issues' raised by such illegal activities will be resolved. These include the following, non-exhaustive, hypothetical scenarios:

- (1) If EUAs obtained through the fraudulent manipulation of measurements from a project were sold, will the buyer be able to apply the EUAs towards its emissions?

²⁶ European Court of Justice, *Stefan Demand v Hauptzollamt Trier*, C-186/96, ECR (1998): I-8529. Opinion of the Advocate General Ruiz-Jarabo Colomer delivered on 7 July 1998.

²⁷ INTERPOL Environmental Crime Programme, 'Guide to Carbon Trading Crime' (INTERPOL June 2013) 11, available at <www.interpol.int/Media/Files/Crime-areas/Environmental-crime/Guide-to-Carbon-Trading-Crime-2013> accessed 20 February 2015

²⁸ *ibid* 11.

- (2) If a bona fide buyer were to sell on the same EUAs, will he incur liability towards his buyer should the latter find that he is unable to do so?
- (3) When, if ever, will a buyer of EUAs that do not exist be able to apply them towards its emissions?
- (4) What if EUAs belonging to A were sold by B to C?
 - (i) Should the EUAs be restored to A or should C be allowed to retain them and either apply them towards its emissions or further trade in them?
 - (ii) If restoration is either impossible or not sought by A, will A have any private-law recourse against C?
 - (iii) What would the basis of any private-law recourse (if any) against B be?

The EU ETS provides no answers to any of these, and other, important questions.

Thirdly, and assuming that EUAs are properly regarded as the subject of property rights, the failure to prescribe some of the key rules relating to their operation represent a missed opportunity at optimising the operation of the EU ETS. Take the simple question on how a legal system is to ascribe loss as between the original owner of a property and its bona fide purchaser. A rule, such as the English common law's default *nemo dat* rule would favour static security. Static security preserves existing allocation of property by ensuring that owners are not deprived of their property by another's acts.²⁹ However, considering the entire premise of the EU ETS is that the facilitation of trade in EUAs will lead to the most economically efficient means of reduction of production of carbon dioxide emissions, it is arguable that the EU ETS ought to prefer dynamic security over static security. Dynamic security favours bona fide purchasers over original owners by allowing them to acquire a title free from unknown prior claims,³⁰ thus incentivising the acquisition of property. Thus, to the extent that the legal rules of some Member States may favour static security over dynamic security, even if the EU ETS otherwise functions properly, it would not function optimally.

It would be far-fetched to suggest that the ambiguity of the legal nature of an EUA has encouraged some of the admittedly widespread illegal activity. Some of

²⁹ René Demogue, 'Security' in A Fouillée et al (eds), *Modern French Legal Philosophy* (Franklin W Scott and Joseph P Chamberlain tr, The Boston Book Co 1916) 418, 428-429.

³⁰ *ibid*, 427-428.

such illegal activity can be curbed by technical, extra-legal measures or the imposition of regulatory safeguards that are unrelated to the legal nature of an EUA. Nor is it the case that a clarification of the EUA's legal nature will ensure the success of the EU ETS by reducing carbon emissions since, for example, an over-allocation of EUAs will limit the effectiveness of the scheme no matter how well defined the legal nature of EUAs is. Nevertheless, it is important to provide certainty to market participants as to their legal rights vis-à-vis other private persons since it is impossible to ensure that no illegal activity occurs. Failure to do so will cause market participants, many of whom are involuntary participants, to incur legal costs to adjudicate upon their rights. These legal costs will inevitably be high because precious relevant guidance will be available to the parties to enable them to predict the outcome of the litigation. This uncertainty will itself hinder the prospects of settlement.³¹ These uncertainties will likewise discourage some from participating in the carbon market. The paucity of guidance within the design of the EU ETS also leaves national courts with an unenviable task. Courts are typically not ideally placed to determine what legal rules will enhance the efficacy of trade in EUAs so as to better achieve the objectives of the EU ETS. Nor, even if they are able to do so, are they necessarily in a position, given their constitutional role, to do so if such rules will require them to depart from established legal rules within their national legal system.

As such, whilst it cannot be said that the paucity of guidance as to the legal nature of EUAs contributed to the sort of carbon fraud seen in *Armstrong v Winnington*, it certainly exacerbated the misfortune of both parties (who may fairly be described as victims of the fraud) as the trial took on an unnecessarily byzantine complexion. While the trial judge no doubt correctly determined that, at least for the purposes of English common law, an EUA constitutes a 'property right of some sort',³² he was left to struggle to determine what private-law rights were conferred by this sort of 'property'. A review of the decision would suggest that, owing to concessions made by the parties, certain possibly mistaken assumptions and a number of unexplored claims, *Armstrong v Winnington* is unlikely to be the final word on the subject even as a matter of English law. It is also useful to remember that *Armstrong v Winnington* purports to answer only one hypothetical question (Question 4(ii) above) according to the laws of one Member State (England). The same process must then be repeated for every possible claim in every hypothetical scenario and every Member State within the EU. It must also be stressed that the parties in *Armstrong v Winnington* raised no conflict of laws issues even though it is plausible given the foreign (German) origins of the EUAs, which would further complicate a dispute. This should afford us an idea of the scale of the uncertainty market participants are subject to within the EU ETS.

3. ARMSTRONG V WINNINGTON

³¹ George L Priest and Benjamin Klein, 'The Selection of Disputes for Litigation' (1984) 13 J Legal Stud 1, 13-17.

³² *Armstrong v Winnington* (n 5) [31].

In *Armstrong v Winnington*, the claimant, Armstrong DLW GmbH, was a German company and an involuntary participant in the EU ETS. It held two accounts with the German registry, one for each of the power plants that it operated. Through a 'phishing' e-mail fraud, a third party obtained access to one of Armstrong's accounts, for its Delmenhorst plant, which contained 22,064 EUAs. Separately, the defendant, Winnington Networks Ltd, a trader of EUAs registered with the United Kingdom registry, was contacted by a Mr Bhovinder Singh, purporting to act for a Dubai based company, Zen Holdings Ltd, with a view to trading in EUAs. Eventually, Winnington agreed to purchase 21,000 EUAs from Zen for a price of €267,645. Payment was made by Winnington after Zen caused 21,000 EUAs to be transferred from Armstrong's account to Winnington. At the time, Winnington was unaware that the account from which the EUAs it had 'purchased' had been transferred belonged to Armstrong. Winnington immediately sold on the 21,000 EUAs to TFS Green for €271,266.25 after it received the same 'from' Zen.

When the fraud was discovered, Armstrong brought a variety of claims against Winnington before the English courts. Initially, according to the trial judge, these appeared to number five:³³

- (1) a common law claim on the basis of money had and received;
- (2) a claim for restitution of the EUAs based on unjust enrichment;
- (3) a claim in equity on the basis of knowing receipt of trust property;
- (4) an equitable proprietary claim on the basis that Winnington held the EUAs or their proceeds on constructive trust; and
- (5) some form of tracing claim or remedy.

Eventually, in closing, these claims were narrowed down to three:³⁴

- (1) a personal claim at common law claim to vindicate its proprietary rights in the EUAs via restitution;
- (2) a personal claim at common law for restitution of the value of the EUAs on the basis of unjust enrichment; and
- (3) a personal claim in equity on the basis of knowing receipt of trust property.

Armstrong had abandoned its claims for proprietary relief in equity by the

³³ *ibid* [23].

³⁴ *ibid* [2].

close of trial.³⁵ In its defence, Winnington denied liability principally on the basis that it had no knowledge that the EUAs which it had purchased 'from' Zen had actually belonged to Armstrong. In legal terms, these translated to the defences of *bona fide* purchase and change of position. While it initially further sought to counterclaim against Armstrong in negligence for its employee's carelessness in responding to the 'phishing' fraud, this was abandoned at the outset of closing submissions.³⁶

The trial judge described 'the legal question at the heart of the dispute as follows. If B steals A's property and sells it to C, does A have a claim against C for the property or its value, and if so, what is the legal basis of A's claim and what defences, if any, does C have to such a claim?'³⁷ According to his Lordship, '[w]here the property in question is goods, the matter is covered by the law of conversion and the principles are relatively clear. However, where the property in question is a chose in action or some other intangible property, the position is less clear.'³⁸ To describe the position as 'less clear' is something of an understatement but the greater problem lies in his formulation of the legal question altogether. Where B steals A's goods and sells it to C, both B (in selling the goods) and C (in taking delivery of the goods) interfere with A's (possessory) rights to the goods. These rights are property rights in the sense that they are rights *in rem* to the goods, enforceable against the world at large. Where the same scenario is applied to a chose in action, let us suppose an unsecured debt at law, two extremely significant differences reveal themselves on closer examination.

First, the subject matter of the interference by both B and C is *not* an *in rem* right but an *in personam* right that A holds against his debtor, D. Whilst a chose in action is often classified as a type of property, in so describing it, we are using 'property' to mean something quite different from the classical *in rem* right. A right *in rem* is a right in or against a thing yet there doesn't appear to be any separate thing that is the subject of a debt other than the debt itself. Furthermore, a right cannot both be *in rem* and *in personam*. An unsecured debt is unarguably *in personam* in nature. A classificatory scheme which purports to distinguish rights *in rem* from rights *in personam* but which then insists that rights *in personam* are themselves *in rem* rights is blatantly unsound. 'Property', as used by lawyers, is a dangerously slippery word and uncharacteristic of a profession that prides itself on precision. Birks famously distinguishes between the use of the label 'property' to loosely mean 'wealth' (which can include *in personam* rights) and a stricter, more technical usage of the word.³⁹ According to Birks, in its more technical usage, property is distinguished from obligations by a bright line, of which the practical

³⁵ *ibid* [24].

³⁶ *ibid* [25].

³⁷ *ibid* [28].

³⁸ *ibid* [29].

³⁹ Peter Birks, 'Before We Begin: Five Keys to Land Law' in Susan Bright and John Dewar (eds), *Land Law: Themes and Perspectives* (OUP 1998) 457, 473.

difference is borne of the question, 'Against whom is the right exigible?' 'A right *in rem* is a right the exigibility of which is defined by the location of a thing. A right *in personam* is defined by the location of the person.'⁴⁰ Perhaps even more plainly, it is said that one of the hallmarks of a property right is its exigibility against strangers to its creation.⁴¹ On this view, many choses in action, such as debts, would not qualify as property at all.⁴² An even stricter view would require the universally exigible right to be separable from a physical thing, preventing even intellectual property rights from qualifying as property.⁴³

It is however arguable that such a definition of property is excessively narrow.⁴⁴ Rather than being symptomatic of laxity, the broader label of 'property' refers to the law's recognition of and willingness to enforce a holder's rights to exclude others from a resource,⁴⁵ whether tangible or intangible, without necessarily providing any clues as to its exigibility. After all, 'the word "property" reflects its semantically correct root by identifying the condition of a particular resource as being "proper" to a particular person.'⁴⁶ It would be a mistake to assume that rights to exclude others from a resource may only be granted by the law through directly enforceable rights against an indefinite class of persons. While legal property rights to tangible things in common law systems take on this form, it is certainly not true of equitable property rights to tangible things, which take on a different, sometimes indirect, form. Suppose A declares that he holds his bicycle on trust for B. If C were to steal the bicycle from A, the law does not permit B to sue C directly.⁴⁷ Instead, B must sue A to direct him to sue C. B's equitable 'property' behaves differently from a legal property in the bicycle. In this case, the right to exclude afforded by equity to B operates indirectly, through the medium of the trustee A. Where legal intangible property is concerned, it is a mistake to assume that a right confers a power to exclude only where it is enforceable against the

⁴⁰ *ibid.*

⁴¹ William Swadling, 'Property: General Principles' in Andrew Burrows (ed), *English Private Law* (3rd edn, OUP 2013) [4.03].

⁴² *ibid* [4.20].

⁴³ *ibid* [4.20]. *Contra* William Swadling, 'Property: General Principles' in Peter Birks (ed), *English Private Law Volume I* (OUP 2000) [4.52]. See also Ben McFarlane, *The Structure of Property Law* (Hart Publishing 2008) 132-137.

⁴⁴ Jim Harris, 'Property – Rights *in Rem* or Wealth?' in Peter Birks and Arianna Pretto (eds), *Themes in Comparative Law: In Honour of Bernard Rudden* (OUP 2002) 51.

⁴⁵ Felix S Cohen, 'Dialogue on Private Property' (1954) 9 Rutgers Law Review 357, 370-371

⁴⁶ Kevin Gray and Susan Francis Gray, 'The Idea of Property in Land' in Susan Bright and John Dewar (eds), *Land Law: Themes and Perspectives* (OUP 1998) 15, 15-16.

⁴⁷ *MCC Proceeds v Shearson Lehmann* [1998] 4 All ER 675. See also *Leigh and Sullivan Ltd v Aliakmon Shipping Co Ltd (The Aliakmon)* [1986] AC 785. *Cf Shell UK Ltd v Total UK Ltd* [2010] EWCA Civ 180, [2011] QB 86, noted Kelvin F K Low, 'Equitable Title and Economic Loss' (2010) 126 LQR 507.

world at large, for example, in the case of copyrights and patents.⁴⁸ Exigibility is distinguishable from exclusivity. The law of property's concern over the power to exclude, in the context of choses in action, lies in the law's identification of the person who is able to provide relief to an obligor in law for the right of the obligee. This concern is the same whether we are concerned with choses in action that are *in personam* (such as debts) or *in rem* (such as patents). Suppose A is the holder of a patent for a widget. Suppose then that B pretends to be A and 'licences' the patent to C, who proceeds to manufacture the widget. The 'licence' is no defence to an action for patent infringement brought by A against C. This is because the law of property provides that only A is able to release C from his duty not to infringe the patent. This pattern is *exactly* the same where the subject-matter of the property is an *in personam* chose in action. Suppose A has been assigned a debt owing by D. Suppose then that B pretends to be A and manages to convince D to 'pay' him. Short of a provision to the contrary in the underlying contract, the 'payment' by D to B would not absolve him of his duty to pay A because the law of property provides that only A may release him from his duty to make payment. Where there are multiple assignments, such as where the creditor first assigns to B and then purports to assign the same debt to C, the law of property tells us that it is not the timing of the assignment but the timing of each assignee's notification of the debtor D, that confers priority to the assignee.⁴⁹ On this view, the law of property does not tell us the content of the right (e.g. not to copy, not to manufacture, to make payment) nor its exigibility (e.g. against the contracting counterparty, against everyone in England and Wales, against everyone in the European Union). It merely tells us who among various competing parties may legitimately control those rights, whatever their exigibility and content.

The preoccupation with equating property with exigibility is unhealthy. On the one hand, it diminishes, quite literally, the law of property. On the other, it leads to some dubious calls for the expansion of exigibility.⁵⁰ At the risk of oversimplification, some scholars argue that holders of *in personam* choses in action ought to be able to sue the world at large for unwarranted 'interferences' because exigibility is a feature of property and a chose in action, even if *in personam*, is property. There are indeed tort actions that *appear* to protect against interferences with *in personam* choses in action. The economic tort of inducement of a breach of contract is the most obvious example. However, *in personam* choses in action were regarded as property well before⁵¹ the modern tort of inducement of breach of

⁴⁸ Cf Swadling (n 43) [4.52].

⁴⁹ The rule in *Dearle v Hall* (1828) 3 Russ 1.

⁵⁰ See, eg, Sarah Green and John Randall, *The Tort of Conversion* (Hart Publishing 2009), Lee Pey Woan, 'Inducing Breach of Contract, Conversion and Contract as Property' (2009) 29 OJLS 511. *Contra* Simon Douglas, *Liability for Wrongful Interferences with Chattels* (Hart Publishing 2011) 18, Amy Goymour, 'Conversion of Contractual Rights' [2011] LMCLQ 67.

⁵¹ See, eg, William Blackstone, *Commentaries on the Laws of England Volume 2 Of the Rights of Things* (Clarendon Press 1765-1769), 442.

contract evolved⁵² out of the action for enticement of a servant founded upon the Statute of Labourers 1349 in the case of *Lumley v Gye*.⁵³ Furthermore, the tort of inducement of breach of contract is more appropriately regarded as a species of accessory liability⁵⁴ than as a property tort. It shares more genetic material with joint tortfeasance than conversion, trespass or any property tort. Accordingly, it can be seen that the appellation 'property' does *not* carry with it any necessary indication of strict rights against third parties for interferences. It is of course possible for the law to develop such rights,⁵⁵ perhaps by further evolving the tort of inducement of breach of contract, some other economic tort or by adapting the tort of conversion, but it is important to recognise that such a development is neither necessary nor necessarily desirable.⁵⁶

Secondly, where the subject matter of the theft is goods, what the common law protects is A's right to possess the same and the law protects against physical interference.⁵⁷ Whilst lawyers often contrast the *in rem* nature of A's right to the goods with *in personam* rights, they often fail to clarify what these *in rem* rights entail. There is no fixed immutable list of rights that attach to property.⁵⁸ For example, unlike rights to land, for which the tort of private nuisance exists, there is generally no legal protection for more ephemeral and intangible interferences with the use of goods. Even where the right is one to land, the law affords no protection from visual trespass.⁵⁹ Thus, to say that the law of 'property' provides A with exclusive rights to a thing barely begins to tell us anything of value for it does not elucidate what those rights entail. The torts protecting property rights to goods principally protect rights to possession. Thus, if B creates a din so that A cannot hear the ringing of his mobile phone, B commits no tort and A has no legal claim against him. Unlike making noise, the act of theft necessarily interferes with A's right to possession of goods.⁶⁰ Hence, the legal response is 'relatively clear'.

But, to employ the example given by the trial judge, suppose B purports to 'steal' A's chose in action (a debt claim against D) and 'sell' it to C, what right of A's

⁵² See, generally, Hazel Carty, *An Analysis of the Economic Torts* (2nd edn OUP 2010) Chap 3.

⁵³ [1853] 2 E&B 216.

⁵⁴ See, eg, the inclusion of the tort in Paul S Davies, *Accessory Liability* (Hart Publishing 2015) Chap 5.

⁵⁵ See, eg, the differences in opinion in *OBG Ltd v Allen* [2007] UKHL 21, [2008] 1 AC 1.

⁵⁶ Goymour (n 50).

⁵⁷ Douglas (n 50) 16-18.

⁵⁸ Craig Rotherham, 'Property and Justice' in Matthew H Kramer (ed), *Rights, Wrongs and Responsibilities* (Palgrave 2001) 148.

⁵⁹ *Victoria Park Racing and Recreation Grounds Co Ltd v Taylor* (1937) 58 CLR 479.

⁶⁰ The only known instance of the tort of conversion not to involve physical interference is the case of a sale which would destroy the claimant's title to the chattel: *Consolidated Co v Curtis & Son* [1892] 1 QB 495, 498.

has either B or C interfered with? The answer is surprisingly straightforward, at least so far as debts and contractual rights are concerned. None whatsoever. A's right was always to claim repayment from D and D alone and the purported sale by B to C of the right does not prevent A from doing so. Let us suppose that C manages to convince D that the chose in action had been properly assigned to him so that D makes repayment to C before A presses for payment. Does that entitle D to refuse to repay A? The answer is still 'no'. D's obligation that comprised A's chose in action was to repay A so that his mistaken payment to C does not entitle him to refuse to perform. A chose in action, unlike land or a chose in possession, is enjoyed through legal action (if necessary). No 'theft' can in and of itself prevent A from insisting on his strict legal rights. Certain 'interferences' may leave A in an awkward position where an insistence on his strict legal rights may be unwise from a personal or economic perspective because he wishes to maintain good relations with D. However, English common law does not generally protect one from having to make difficult choices. If we then turn our attention to EUAs, the right to emit, like an unsecured debt, is not universally exigible. It is designed to be exigible *only* against Member States since it affords protection to the holder of an EUA from criminal liability against Member States from sanctions for failing to surrender sufficient EUAs. It affords no protection from sanctions as against non-Member States. Since it is intangible, like an unsecured debt claim, it is difficult to imagine how it may be interfered with by an unauthorised sale, unless the law setting up the EU ETS enables it.

The obvious retort is that the EUAs once registered in Armstrong's name were no longer so registered but this reflects both a failure to distinguish between a right and its record as well as the varying functions of registration systems. Registration systems serve as *records* of rights. They do *not* represent the rights themselves. It is thus not strictly accurate to state that 'an EUA exists only in electronic form.'⁶¹ It is the inconclusive *record* that exists in electronic form. The EUA itself has no form whatsoever. Registers, as distinct from the rights they record, are heterogeneous and function differently depending on design. Some registration systems provide prima facie evidence of title such as the case of shares,⁶² patents,⁶³ and registered designs.⁶⁴ Some registration systems, such as that for trade marks, do not purport to provide any indication as to title at all, whether prima facie or otherwise.⁶⁵ At the other extreme, registration of a fee simple title to land provides far greater protection than prima facie evidence of title, going so far as to validate an otherwise void transfer. Section 58(1) of the English Land Registration Act 2002 provides: 'If, on the entry of a person as the proprietor of a legal estate, the legal estate would not otherwise be vested in him, it shall be deemed to be vested in him as a result of the registration.' The entry of a notice on the register of an equitable

⁶¹ *Armstrong v Winnington* (n 5) [49].

⁶² Section 127 Companies Act 2006.

⁶³ Section 32(9) Patents Act 1977.

⁶⁴ Section 17(8) Registered Designs Act 1949.

⁶⁵ Trade Marks Act 1994.

interest in land behaves differently again, providing priority without validating invalid transfers. Section 32(3) of the English Land Registration Act 2002 provides: 'The fact that an interest is the subject of a notice does not necessarily mean that the interest is valid, but does mean that the priority of the interest, if valid, is protected for the purposes of sections 29 and 30.' With no provision being made as to the protective effects, whether positive or negative,⁶⁶ of registration of EUAs, it was always likely that the courts, at least in England and Wales, will decide that registration following an unauthorised transfer is ineffective to transfer title. Thus, it is unsurprising that in *Armstrong v Winnington*, the trial judge concludes that 'legal title remained, at all relevant times, vested in Armstrong.'⁶⁷ However, if this is the case, then surely the conclusion ought to be that, as a matter of law, there was no actionable interference with Armstrong's EUAs at all.

3.1 THE CASE OF THE MISSING DEFENDANT

The analogy with bank operations suggested by Carlarne⁶⁸ provides us with a helpful starting point, especially since 'money' held in a bank account takes the form of a debt, a chose in action. Even if the court in *Armstrong v Winnington* is correct in denying that an EUA is strictly speaking a chose in action,⁶⁹ both EUAs and debts share important similarities. They are both intangible property with limited, rather than universal, exigibility. A debt is only enforceable against the debtor. Likewise, an EUA only protects its holder from fines imposed by Member States participating in the EU ETS. There is a further helpful similarity between EUAs and credit balances in bank accounts. Statements of bank accounts are not generally regarded as conclusive. Neither, it would seem, were entries in registries of EUAs at the time, at least if we take *Armstrong v Winnington*'s conclusion that Armstrong retained legal title at all times. It is important to note that the register, as originally conceived, was simply a means of accounting for EUAs.⁷⁰ It is instructive then to consider how

⁶⁶ See generally McFarlane (n 43) 83-86.

⁶⁷ *Armstrong v Winnington* (n 5) [287].

⁶⁸ Carlarne (n 17).

⁶⁹ *Armstrong v Winnington* (n 5) [48]. It is suggested, contrary to the trial judge's view, that a chose in action need not be limited to a Hohfeldian right but may also comprise a Hohfeldian liberty. A chose in action is simply a right enjoyed by way of legal action, whether the enjoyment takes the form of a claim (right) or a defence (liberty) to a claim. On the subject of Hohfeldian rights, see Wesley Newcomb Hohfeld, 'Some Fundamental Legal Conceptions as Applied in Judicial Reasoning' (1913) 23 YLJ 16.

⁷⁰ Article 19 of the Directive provides: 'Member States shall provide for the establishment and maintenance of a registry in order to ensure the accurate *accounting* of the issue, holding, transfer and cancellation of allowances.' [Emphasis added.] Article 4(3) of the new Regulations provides: "Member States shall use the Union Registry for the purposes of meeting their obligations under Article 19 of Directive 2003/87/EC and Article 11 of Decision No 406/2009/EC and to ensure

Armstrong v Winnington would have been decided had the case involved a credit balance in a bank account rather than EUAs?

In the first place, had the fraud involved a credit balance in a bank account rather than an EUA, Winnington is unlikely to have been sued as a defendant. Instead, Armstrong is likely to have either sued the German registry instead or simply insisted on using the 'missing' EUAs for its own compliance purposes, at least if German law was the same as English law. This is because, '[t]he basic answer in English law is that, in the absence of fraud, the customer is not precluded by the bank statement or the pass-book from disputing an error or an incorrect debit made by the bank or from insisting on its correction.'⁷¹ Since the register, like a bank statement, is not legally conclusive, upon proof that the transfer was unauthorised, Armstrong ought to be able to insist upon its rectification or deliver up the 'missing' EUAs for its compliance purposes since it remained their legal owner.

However, the analogy to a bank account cannot be carried too far. The transfer of money between bank accounts differs significantly from a normal conception of a transfer of property, such as occurs with a transfer of corporeal money. 'The first and most obvious difference from a transfer of corporeal money is that the beneficiary does not obtain the same asset as previously belonged to the originator. It is not like a transfer of the very same coins or banknotes from the payor to the recipient, as happens when a person pays corporeal money.'⁷² Thus, '[t]he explanation of how property in incorporeal money is transferred has very little to do with the law governing the transfer of chattels by delivery. Far more relevant are the principles of the law of contract and agency, and the enforcement of title to choses in action.'⁷³ In truth, there is no 'transfer' as traditionally understood in the law of property:

The chose in action representing the money transferred to the recipient's bank account is a distinct item of property from the chose in action representing the funds which were originally in the payer's account. The payer's title to the money is not strictly transferred. Instead, the title to the value represented in the transfer passes to the recipient because the payer's bank extinguishes (wholly or partially) the debt which it owes the payer, and the recipient's bank creates a new debt owed by itself to the recipient.⁷⁴

In the transaction, both the payer's bank⁷⁵ and the recipient's bank⁷⁶ act as

accurate *accounting* of allowances, AEAs and to the credit entitlement within the scope of this Regulation.' [Emphasis added.]

⁷¹ E P Ellinger, E Lomnicka and C V M Hare, *Ellinger's Modern Banking Law* (5th edn OUP 2011) 236.

⁷² David Fox, *Property Rights in Money* (OUP 2008) [5.25].

⁷³ *ibid* [5.03].

⁷⁴ *ibid* [5.05].

⁷⁵ Ellinger, Lomnicka and Hare (n 71) 610.

their respective customers' agents.

This, however, does not seem to be how the EU ETS was conceived of operating. The EU ETS does not conceive of registries extinguishing and creating fresh EUAs with every 'transfer'. Article 19 of the Directive in its original form conceived of 'the issue, holding, *transfer* and cancellation of allowances.' [Emphasis added.] There is also no need to do so. Credit balances in bank accounts represent contractual debts owed by banks to their customers.⁷⁷ It is impossible to substitute either the debtor or the creditor (or both in the case of many 'transfers') without offending the doctrine of privity in the law of contract.⁷⁸ As a right that was created with the express intent that it would be transferable, there is no equivalent legal impediment to a more straightforward understanding of how EUAs are transferred. Nor do either the transferring or receiving registry act as agents to the transferor or the recipient. The trial judge was accordingly correct to reject the argument initially raised by Armstrong 'that the EUAs which were received by Winnington on 28 January 2010 into its registry account were different EUAs from those which had been lodged in Armstrong's account'.⁷⁹ Nevertheless, the basic premise that Armstrong's rights to the EUAs remained unaffected holds. Thus, unlike modern land registration systems, the older system of registration of deeds that was applied to Yorkshire⁸⁰ and Middlesex,⁸¹ which like the EU ETS did not purport to validate otherwise void transfers, provided no rights to recipients who register void instruments, whether because of forgery⁸² or fraud.⁸³ The main complication with this analysis is that the Directive implementing the EU ETS made no provision whatsoever for the rectification of the register following void transfers even though registration under the Directive provided no benefits whatsoever in terms of securing title, whether *prima facie* or conclusive. This lacuna in the Directive may explain why Armstrong did not bring an action seeking the rectification of the German registry.

3.2 THE CLAIM IN EQUITY

Whatever the reasons for the litigation taking shape in the way that it eventually did, the absence of the most obvious party to the suit left the trial judge in the most difficult of positions. Having effectively concluded that the *nemo dat* rule

⁷⁶ Ellinger, Lomnicka and Hare (n 71) 625. *Contra* Richard King, 'The Receiving Bank's Role in Credit Transfer Transactions' (1982) 45 MLR 369. *Cf* Benjamin Geva, *Bank Collections and Payment Transactions* (OUP 2001) 296.

⁷⁷ *Foley v Hill* (1848) 2 HLC 28.

⁷⁸ See generally Hugh Beale (ed), *Chitty on Contracts* (31st edn, Sweet & Maxwell 2012) Chap 18.

⁷⁹ *Armstrong v Winnington* (n 5) [67].

⁸⁰ Yorkshire (West Riding) Land Registry Act 1703 (2 & 3 Ann c 4)

⁸¹ Middlesex Registry Act 1708 (7 Ann c 20)

⁸² *Re Cooper* (1882) 20 Ch D 611.

⁸³ *Sutherland v Peel* (1864) 1 WW & A'B 18

applied so that Armstrong retained legal title to the EUAs, and not being in a position to give effect to this legal title to intangible property in the most obvious way (through a rectification of the register), the trial judge struggled to give effect to Armstrong's property right.

Armstrong asserted three different claims by the close of trial, two of which were 'proprietary'. One claim was premised upon the extremely controversial notion that there existed in English law a proprietary restitutionary claim. The other was premised upon the more well-established equitable claim for unconscionable receipt of trust property, but which depended upon a finding of separation of legal and equitable title that was not immediately apparent on the facts. Whereas normally a claimant, offered a choice between a legal proprietary claim and an equitable proprietary claim, would prefer the former to the latter, because equitable property is generally susceptible to being overreached by a bona fide purchaser of the legal title for value without notice,⁸⁴ the trial judge appears to have preferred to resolve Armstrong's claim in its favour via the equitable route.⁸⁵

According to the trial judge, '[t]he starting point is to determine whether, on the facts, by the time that the EUAs were received by Winnington at 11.30 on 28 January 2010, legal and equitable title to the EUAs had become separate, or rather, legal title (as well as beneficial ownership) remained with Armstrong.'⁸⁶ His Lordship found that, '[s]ome time between 07.45 and 11.30 on 28 January 2010, the third party fraudster gained de facto ministerial control over the EUAs lying in Armstrong's account.'⁸⁷ This gave the fraudster 'some form of de facto legal title' but that, apparently following *Westdeutsche Landesbank Girozentrale v Islington London Borough Council*,⁸⁸ it 'did not deprive Armstrong of its beneficial entitlement to those EUAs'.⁸⁹ This sufficed to allow Armstrong to pursue its claim that Winnington had been in unconscionable receipt of trust property. Having concluded that the EUAs received by Winnington were the same EUAs as those 'lost' by Armstrong rather than merely their traceable product,⁹⁰ the only question was whether Winnington's knowledge at the relevant time was sufficiently 'unconscionable'. The trial judge concluded that it did, principally because it had requested information to confirm that the party it was dealing with, Zen, either owned or was authorised to transfer the EUAs in question but proceeded with the transaction without receiving

⁸⁴ David Hayton, Paul Matthews and Charles Mitchell, *Underhill and Hayton: Law of Trusts and Trustees* (18th edn, LexisNexis 2010) [2.6]. See also Philip H Petit, *Equity and the Law of Trusts* (12th edn, OUP 2012) 84-86, Graham Virgo, *The Principles of Equity & Trusts* (OUP 2012) 50-51.

⁸⁵ *Armstrong v Winnington* (n 5) [273]-[289].

⁸⁶ *ibid* [273].

⁸⁷ *ibid*.

⁸⁸ [1996] AC 669, 716 per Lord Browne-Wilkinson.

⁸⁹ *Armstrong v Winnington* (n 5) [276].

⁹⁰ *ibid* [67]

a satisfactory reply.⁹¹ The questions were raised following Winnington's own internal due diligence procedures (known as 'know your client' or 'KYC' in short). This met the threshold for establishing liability for unconscionable receipt of trust property because it constituted knowledge within the band of either type (2) or type (3) on the *Baden* scale. The *Baden* scale of knowledge refers to the controversial⁹² system of classification of knowledge by Peter Gibson J in *Baden v Société Générale pour Favoriser le Développement du Commerce et de l'Industrie en France SA (Note)*.⁹³ They are, in decreasing order of blameworthiness:

- (1) actual knowledge;
- (2) wilfully shutting one's eyes to the obvious;
- (3) wilfully and recklessly failing to make such inquiries as an honest and reasonable man would make;
- (4) knowledge of circumstances which would indicate the facts to an honest and reasonable man; and
- (5) knowledge of circumstances which would put an honest and reasonable man on inquiry.

This analysis of the claim in equity raises a number of difficulties. First, it appears to contemplate the existence of relative title at law to pure intangible property, something previously unheard of. Thus, to the question 'at common law is it possible to create relative titles to intangible property?', it has been posited that '[i]n principle, it seems that this is not possible, at least where the title arises from a right of ownership. There can be only one valid right of legal ownership to a chose in action.'⁹⁴ In common law systems, relative title to property can arise either through the acts of an interloper or as a result of a series of derivative transfers of legal title. The classic example of the former is the squatter of land. The latter typically arises following multiple assignments of the same property. The former is limited in its application to tangible property because it arises by the act of taking of possession

⁹¹ *ibid* [279]-[281].

⁹² See, for example, in the context of the claim in question, *Bank of Credit and Commerce International (Overseas) Ltd v Akindele* [2001] Ch 437, at 455 per Nourse LJ: 'A test in that form, though it cannot, any more than any other, avoid difficulties of application, ought to avoid those of definition and allocation to which the previous categorisations have led.' The *Baden* scale has been decisively rejected in the context of claims for dishonest assistance. Thus, according to Lord Nicholls in *Royal Brunei Airlines Sdn Bhd v Tan* [1995] 2 AC 378, at 392: "Knowingly" is better avoided as a defining ingredient of the principle, and in the context of this principle the *Baden* [1993] 1 WLR 509 scale of knowledge is best forgotten.'

⁹³ [1993] 1 WLR 509, 575-576.

⁹⁴ David Fox, 'Relativity of Title at Law and in Equity' (2006) 65 CLJ 330, 361.

and '[a] pure intangible ... is incapable of being possessed. This method of generating a relative title in tangible assets simply cannot apply to such a chose in action. The title is in the person with the right to sue on the claim. The right is necessarily unitary.' Furthermore, one of the features of relativity of title is that a defendant who is sued for interfering with the property, for example, in conversion, is generally *not* permitted to plead the *jus tertii* of the true owner of the thing.⁹⁵ However, it is not obvious how this rule is adaptable to the context of intangible property. Does it mean that an obligor cannot resist enforcement of the intangible property by the holder of the weaker, relative, title? This does not appear to be the case in respect of intellectual property rights.⁹⁶

Secondly, even if it were possible for Zen to acquire a relative legal title to the EUAs by gaining control of Armstrong's account, there is still the further difficult question of how Armstrong acquired an equitable title to the EUAs so as to found its claim in unconscionable receipt of trust property as against Winnington. The trial judge is on surer ground in clearing this second obstacle to Armstrong's claim in equity. By way of *obiter*, Lord Browne-Wilkinson in *Westdeutsche Landesbank Girozentrale v Islington London Borough Council* opined:⁹⁷

The argument for a resulting trust was said to be supported by the case of a thief who steals a bag of coins. At law those coins remain traceable only so long as they are kept separate: as soon as they are mixed with other coins or paid into a mixed bank account they cease to be traceable at law. Can it really be the case, it is asked, that in such circumstances the thief cannot be required to disgorge the property which, in equity, represents the stolen coins? Moneys can only be traced in equity if there has at some stage been a breach of fiduciary duty, ie if either before the theft there was an equitable proprietary interest (eg the coins were stolen trust moneys) or such interest arises under a resulting trust at the time of the theft or the mixing of the moneys. Therefore, it is said, a resulting trust must arise either at the time of the theft or when the moneys are subsequently mixed. Unless this is the law, there will be no right to recover the assets representing the stolen moneys once the moneys have become mixed.

⁹⁵ The case of *Costello v Chief Constable of Derbyshire Constabulary* [2001] 1 WLR 1437 is the most flagrant example of this rule. In that case, the plaintiff, who had been in possession of a stolen car, successfully sued the police in conversion after their authority (derived from statute) to detain the car. Cf Section 8 of the Torts (Interference with Goods) Act 1977.

⁹⁶ Thus, according to Neuberger J (as he then was) in *Farmer v Moseley (Holdings) Ltd (t/a RTK Marine)* [2000] EWHC Patents 128, [45]: 'it does appear to me that ... in an action for infringement of an intellectual property right, it is for the claimant to establish that, on the balance of probabilities, he is the proprietor of that right.' Cf *Rhone-Poulenc Rorer International Holdings Inc v Yeda Research and Development Co Ltd* [2006] RPC 24, 618.

⁹⁷ [1996] AC 669, 715-716.

I agree that stolen moneys are traceable in equity. But the proprietary interest which equity is enforcing in such circumstances arises under a constructive, not a resulting trust. Although it is difficult to find clear authority for the proposition, when property is obtained by fraud, equity imposes a constructive trust on the fraudulent recipient: the property is recoverable and traceable in equity.

However, despite its apparent pedigree, this line of reasoning remains fraught with controversy. Thus, in *Shalson v Russo*, Rimer J commented on Lord Browne-Wilkinson's *obiter* remarks in *Westdeutsche* in the following terms:⁹⁸

I do not find that an easy passage. As to the first paragraph, a thief ordinarily acquires no property in what he steals and cannot give a title to it even to a good faith purchaser: both the thief and the purchaser are vulnerable to claims by the true owner to recover his property. If the thief has no title in the property, I cannot see how he can become a trustee of it for the true owner: the owner retains the legal and beneficial title. If the thief mixes stolen money with other money in a bank account, the common law cannot trace into it. ...

As to Lord Browne-Wilkinson's more general proposition in the second paragraph that property obtained by fraud is automatically held by the recipient on a constructive trust for the person defrauded, I respectfully regard the authorities he cites as providing less than full support for it. At any rate, they do not in my view support the proposition that property transferred under a voidable contract induced by fraud will immediately (and prior to any rescission) be held on trust for the transferor.

Lord Browne-Wilkinson's *obiter* remarks have been defended on the basis that its critics have misunderstood the subject-matter of the constructive trust. The trust, it is said, arises over the thief's relative possessory title rather than that of the true owner. 'There is no absolute reason why that possessory legal title cannot be held on trust. ... Properly understood, the subject-matter of the constructive trust in favour of the victim of the theft is the thief's possessory title to the stolen money rather than the victim's retained, and superior, interest as legal owner.'⁹⁹ Obviously, this view of Lord Browne-Wilkinson's *obiter* would not be applicable in *Armstrong v Winnington* for the obvious reason that it is impossible to establish a relative title to a pure intangible. But even if we are to ignore this objection, difficulties remain. It is clear that Lord Browne-Wilkinson contemplates the imposition of this constructive trust for the purposes of allowing a victim of theft to employ equity's more generous rules of tracing, a process by which common law systems permit rights to particular things to be effectively transmitted to their substitutes. Yet, the claim as permitted

⁹⁸ [2005] Ch 281, [110]-[111]. See also A J Oakley, *Parker and Mellows: The Modern Law of Trusts* (9th edn, Sweet & Maxwell 2008) 446.

⁹⁹ Fox (n 72) 143.

by the trial judge eschews the need for any tracing whatsoever.¹⁰⁰

Finally, the characterisation of Winnington's knowledge at the relevant time as unconscionable may be open to challenge. This characterisation stemmed primarily from Winnington's failure to receive a satisfactory response to the KYC questions that it had posed to its counterparty, Zen. Winnington sought to explain its failure to press for answers on the basis that it had 'believed that ETS registry accounts were secure and that only an authorised person could transfer allowances and thus that the fact of transfer was sufficient proof of ownership. This was why they did not need the KYC information to prove ownership.'¹⁰¹ While the trial judge accepted 'that there is a certain logic in the proposition', this was insufficient as it did not establish that Winnington believed that 'the registry accounts were *entirely* secure, and, further and more importantly, that they did not believe, or work on the assumption, that mere transfer of EUAs was sufficient to prove ownership of the EUAs.'¹⁰² Winnington's case that 'the fact of transfer *before payment* ... abrogated the need for the KYC information relating to registry account details' was rejected by the trial judge on the basis that '[i]f mere transfer does prove ownership, it does so whenever the transfer takes place – whether before or after payment.'¹⁰³ The difficulty with this reasoning is that it involves a misconstruction of Winnington's case altogether. In any trade, unless the circumstances arouse suspicions, the foremost risk in the minds of a trader is counterparty risk, not fraud. Winnington's case fits perfectly the oft-cited words of Bowen LJ in *Sanders Brothers v Maclean & Co*:¹⁰⁴

But the practice of merchants, it is never superfluous to remark, is not based on the supposition of possible frauds. The object of mercantile usages is to prevent the risk of insolvency, not of fraud; and any one who attempts to follow and understand the law merchant will soon find himself lost if he begins by assuming that merchants conduct their business on the basis of attempting to insure themselves against fraudulent dealing. The contrary is the case. Credit, not distrust, is the basis of commercial dealings; mercantile genius consists principally in knowing whom to trust and with whom to deal, and commercial intercourse and communication is no more based on the supposition of fraud than it is on the supposition of forgery.

¹⁰⁰ *Armstrong v Winnington* (n 5) [65]-[67].

¹⁰¹ *ibid* [226].

¹⁰² *ibid* [227].

¹⁰³ *ibid* [233].

¹⁰⁴ (1883) 11 QBD 327, 343. See also *Cahn v Pockett's Bristol Channel Steam Packet Co Ltd* [1899] 1 QB 643, 661; *National Westminster Bank Ltd v Barclays Bank International Ltd* [1975] QB 654, 674-675; *Barclays Bank v Quincecare* [1992] 4 All ER 363, 377; *Macmillan Inc v Bishopsgate Investment Trust Plc (No. 3)* [1995] 1 WLR 978, 1015; *National Westminster Bank Plc v Rabobank Nederland* [2007] EWHC 1056 (Comm), [379].

Winnington, as a trader in allowances, was concerned primarily that it will receive the allowances that it purchases. There was no cause to suspect fraud at the outset. If the counterparty is prepared to, as Zen was on the facts, transfer the allowances *before* it had to make payment, then Winnington's concerns as to counterparty risk obviously dissipates. If, however, payment is agreed to precede transfer or if they are agreed to be concurrent obligations, then the KYC questions will serve to alleviate Winnington's concerns as to Zen's ability to transfer the EUAs agreed upon. The questions were posed to Zen at the outset because it was not clear on what basis the trade was supposed to proceed. They were superseded once it was clear that Zen was prepared to transfer the allowances *before* payment. Thus, whilst Bowen LJ's advice had been cited,¹⁰⁵ it does not appear to have been heeded. Whilst it is therefore true that '[i]nsisting on transfer *before* (rather than after) payment guards against the risk of non-performance (i.e. non-delivery) and not against the risk that the transferor does not have title or authority',¹⁰⁶ the trial judge offers no reasons apart from the unanswered KYC questions why Winnington ought to have been on guard as against Zen as to possible fraud in the first place. It may perhaps be desirable for the workings of the carbon market that Bowen LJ's words are disregarded but if so, one should expect an accounting of why this is the case.

3.3 THE CLAIMS AT COMMON LAW

Armstrong raised two claims at common law. First, a common law proprietary restitutionary claim. Secondly, a common law claim in restitution for unjust enrichment. Both claims were rooted in the profoundly difficult decision of *Lipkin Gorman v Karpnale Ltd*¹⁰⁷ by the House of Lords and represented differing interpretations of that abstruse decision as well as its progeny. It is hence instructive to examine *Lipkin Gorman* briefly before an analysis of its application in *Armstrong v Winnington* is attempted. In *Lipkin Gorman*, the rogue Cass was a partner in the plaintiff firm of solicitors. In order to feed his gambling habit, Cass withdrew a sum of money from the firm's client account at Lloyd's Bank without authority. Cass lost most of that money at the Playboy Club operated by the defendant. The plaintiff's claim against the defendant succeeded. The precise basis of the claim is the subject of intense dispute but it is necessary to make two uncontroversial observations of the decision. First, legal title to the cash passed to Cass and not the plaintiff firm upon withdrawal.¹⁰⁸ Secondly, a central plank enabling the plaintiff to succeed in their claim rested on their ability to trace their property from their chose in action against the bank into the cash withdrawn by Cass.¹⁰⁹ The claim upon which the plaintiff eventually succeeded was for money had

¹⁰⁵ *Armstrong v Winnington* (n 5) [117].

¹⁰⁶ *ibid* [233]

¹⁰⁷ [1991] 2 AC 548.

¹⁰⁸ *ibid* 573, following *Union Bank of Australia Ltd v McClintock* [1922] 1 AC 240 and *Commercial Banking Co of Sydney Ltd v Mann* [1961] AC 1.

¹⁰⁹ *ibid* 573-574.

and received,¹¹⁰ but there is a sharp division of academic opinion as to whether relief was granted in response to the vindication of a property right¹¹¹ or in response to unjust enrichment.¹¹²

The trial judge in *Armstrong v Winnington* preferred the proprietary restitutionary analysis of *Lipkin Gorman*.¹¹³ Whilst Winnington sought to distinguish *Lipkin Gorman* by emphasising that the successful cause of action in that case (being money had and received) could not possibly assist Armstrong in its claim since EUAs are obviously not money, the trial judge disagreed. '[T]here is no reason why, in an appropriate case, a claimant does not have a personal claim at law to vindicate his legal proprietary rights in respect of a chose in action or form of other intangible property.'¹¹⁴ The trial judge considered, however, that Winnington could seek to avail itself of the defence of bona fide purchase for value without notice,¹¹⁵ though he considered that they could not succeed in establishing the defence for much the same reasons as to why he found them liable for unconscionable receipt of trust property.¹¹⁶ Whilst it is not clear whether the trial judge also accepted that change of position was also a defence to the proprietary restitutionary claim,¹¹⁷ on the facts and for much the same reasons as to why the bona fide purchase defence failed, Winnington also could not make out the defence.¹¹⁸

Given the state of the law before him, it is difficult to fault the trial judge's preference for the proprietary restitutionary analysis of *Lipkin Gorman*. However, having favoured such an analysis, it is difficult to understand why the trial judge considered bona fide purchase a defence to the claim. Proponents of a *general* bona fide purchase defence support an unjust enrichment analysis of the claim.¹¹⁹ In contrast, the principal proponent of the proprietary restitutionary claim posits that '[t]he ambit of the *bona fide* purchase defence depends on whether the proprietary restitutionary claim is brought at common law or in equity.'¹²⁰ This is because '[t]he function of the *bona fide* purchase defence is to make good defects in the defendant's title to property.'¹²¹ On this view, the reason the defence was available in *Lipkin*

¹¹⁰ *ibid* at 570.

¹¹¹ Graham Virgo, *The Principles of the Law of Restitution* (2nd edn, OUP 2006) 645-646.

¹¹² Peter Birks, *Unjust Enrichment* (2nd edn, OUP 2005) 66-68, Andrew Burrows, *The Law of Restitution* (3rd edn, OUP 2010) 168-172.

¹¹³ *Armstrong v Winnington* (n 5) [84].

¹¹⁴ *ibid* [88].

¹¹⁵ *ibid* [99]-[102].

¹¹⁶ *ibid* [288].

¹¹⁷ *ibid* [103].

¹¹⁸ *ibid* [289].

¹¹⁹ Burrows (n 112) 573-580.

¹²⁰ Virgo (n 111) 657.

¹²¹ *ibid* 656.

Gorman was because the subject matter in that case was money. As currency,¹²² title to money is lost when it passes into circulation as currency and into the hands of a bona fide purchaser for value. EUAs are not currency. As such, it is difficult to understand why the bona fide purchase defence was considered available to Winnington in respect of Armstrong's proprietary restitutionary claim. Another possible explanation for the availability of the bona fide purchase defence in *Lipkin Gorman* lies in the tracing exercise employed to establish the plaintiff's case. On this view, '[w]hether a claimant's right in the asset originally received was created upon the receipt or survived from before the story began, and whether it was an immediately vested right or a power, *his right in the substitute after non-consensual substitution is always a power. It is a power to vest the currently traceable substitute in himself.*' [Emphasis added.]¹²³ It is also possible that the plaintiff's right in *Lipkin Gorman*, is defeasible by a bona fide purchase defence because it took the form of a power to vest title in the cash, which it should be recalled initially vested in Cass, in itself. However, the trial judge in *Armstrong v Winnington* had rejected tracing as forming any part of Armstrong's case,¹²⁴ so this explanation is likewise unsatisfactory.

As to Armstrong's remaining claim in unjust enrichment, the trial judge does not appear to have reached any clear conclusion on its merits except to hint that, should his analysis of *Lipkin Gorman* as a proprietary restitutionary claim be wrong, he would be inclined to permit Armstrong's claim on this basis.¹²⁵ As a result of the brevity of this aspect of the decision,¹²⁶ it is difficult to evaluate with any confidence. Whereas the trial judge appears to accept that 'the general rule is that a claim in unjust enrichment is only generally available where the benefit has been provided directly by the claimant to the defendant, and not where it has been provided indirectly via a third party',¹²⁷ no clear explanation can be found as to how this obstacle is surmounted on the facts of *Armstrong v Winnington*. The only exception referred to by the trial judge is 'the case where the claimant has title and can trace through the third party'¹²⁸ but we have already seen that tracing had been rejected as irrelevant on the facts.¹²⁹

4. THE AFTERMATH: THE EMPEROR'S NEW CLOTHES

Partly in response to the widespread cyber 'theft' of carbon credits,¹³⁰ a set of

¹²² David Fox, 'Bona Fide Purchase and the Currency of Money' (1996) 55 CLJ 547.

¹²³ Birks (n 112) 198.

¹²⁴ *Armstrong v Winnington* (n 5) [67].

¹²⁵ *ibid* [98].

¹²⁶ *ibid* [95]-[98].

¹²⁷ *ibid* [97].

¹²⁸ *ibid*.

¹²⁹ *ibid* [67].

¹³⁰ Apart from *Armstrong v Winnington*, *ibid*, see *Holcim (Romania) v Commission (Judgment)* [2014] EUECJ T-317/12 (18 September 2014).

new EU ETS registry Regulations was promulgated in 2013. The new Regulations¹³¹ are intended to address some of the teething problems encountered by the EU ETS. It is notable that a single EU Registry was set up to consolidate the registry infrastructure,¹³² which is certainly laudable. However, the principal provision that would be of interest to property lawyers would be Article 40. The most obviously relevant provisions are Article 40(2) and (4). Article 40(2) provides that the registry record provides *prima facie* evidence of title to an EUA whereas Article 40(4) establishes a defence of good faith.

The utility of Article 40(4) has been doubted even before the regulations came into force. It is said that '[t]he strength of this protection [for an innocent purchaser] is eroded by (i) the uncertainty of the meaning of good faith, which is likely to be different in each Member State, (ii) the uncertainty as to the precise approach applicable to determining the law relating to proprietary issues (e.g. *lex fori* or *lex loci rei sitae* etc.), and (iii) the ability expressly maintained by [Article 40(3)] to allow the victim of a theft to pursue claims, available under the laws of individual Member States, against an innocent purchaser (other than those that might require the return of the carbon credits stolen).'¹³³ It is possible that the criticism is understated. Conflict of laws rules in respect of intangible property have always been somewhat limited because the rights themselves (how they are enforced, what defences are available, whether and how they are transferable) are *always* the province of the law governing the right.¹³⁴ This is because there is in truth no separation of thing and right in intangible property. The right *is* the *res* and since it is a legal right, it must by definition be created by a legal system. Yet an EUA is an intangible right without a fixed legal system. It, like tangible property rights, is imbued with the chameleonic ability to adopt different governing laws as it is traded across borders even though, unlike tangible property rights, no identifiable thing exists apart from the right.

Furthermore, Article 40(2) and (3) is even more disconcerting, representing a schizophrenic view of the nature of an EUA and its registry record. Article 40(2) provides that the registry record is only *prima facie* evidence of title. Yet Article 40(3) effectively prevents any rectification of the record, thereby creating the oxymoronic notion of an unalterable inconclusive record. For jurisdictions like England and Wales, whereby property rights to intangible property represented by non-conclusive accounts are principally 'enforced' through either ignoring the accounts or through their rectification, the new Regulations will cause great consternation. Whereas the difficulty faced by the court in *Armstrong v Winnington* may be said to result from the claimant's voluntary (if perhaps ill-advised) litigation strategy, it appears that any future claimant will be forced to adopt the same strategy. Whilst the absence of a clear procedure for rectification of the register as

¹³¹ Commission Regulation (EU) No 389/2013 of 2 May 2013.

¹³² Art 4 of the EU ETS Regulation.

¹³³ Zaman (n 4).

¹³⁴ Adrian Briggs, *The Conflict of Laws* (3rd edn, OUP 2013) 307-312.

the primary means for the protection of an intangible 'property' was lamentable, the present regulations' outright prohibition of any rectification altogether is downright deplorable.

At the heart of this confusing state of affairs lies the failure to distinguish between an EUA and its record. This confusion can be seen both in Article 40(2) of the new regulations as well as from paragraph 8 of its explanatory notes to the Regulation. According to Article 40(2), '[t]he dematerialized nature of [an EUA] shall imply that the record of the Union Registry shall constitute *prima facie* and sufficient evidence of title over an [EUA],'¹³⁵ suggesting that the intangible nature of a 'property' implies that any record of it may constitute *prima facie* title. This misunderstands both intangible property and the role of registers. An electronic record of an intangible property does not mean that it exists in electronic form¹³⁵ but that its record does. Registration may provide conclusive proof of title,¹³⁶ *prima facie* proof of title,¹³⁷ or no proof at all.¹³⁸ Indeed, no register is even necessary for the existence of intangible property.¹³⁹ Its role so far as evidencing title is a matter of design, *not* implication. Paragraph 8 of the explanatory note to the Regulation further provides, *inter alia*:

Moreover, to reduce the risks associated with the reversal of transactions entered in a registry, and the consequent disruption to the system and to the market that such reversal may cause, it is necessary to ensure that allowances and Kyoto units are fully fungible. In particular, transactions cannot be reversed, revoked or unwound, other than as defined by the rules of the registry, after a moment set out by those rules.

This passage demonstrates a fundamental misunderstanding both about fungibility as well as how security is afforded to participants in a system of registration. Goode has remarked that '[t]he concept of fungibility is well established, yet it remains imperfectly understood. This is ... partly because of an unfortunate tendency to define fungibility in terms of the physical characteristics of the subject-matter.'¹⁴⁰ The EU Regulations goes even further to confuse fungibility with specific recovery. The prevention of specific recovery does not imbue a property with the characteristic of fungibility. Otherwise, all property apart from land would be regarded as fungible in common law systems.

Likewise, the suggestion that the prevention of rectification will somehow prevent disruptions to the market is completely off the mark. Market participants are not simply concerned that EUAs registered in their accounts will remain so

¹³⁵ *Contra Armstrong v Winnington* (n 5) [49].

¹³⁶ Section 58(1) Land Registration Act 2002.

¹³⁷ Section 32(9) Patents Act 1977.

¹³⁸ Trade Marks Act 1994.

¹³⁹ Copyright, Designs and Patents Act 1988.

¹⁴⁰ Roy Goode, 'Are Intangible Assets Fungible?' [2003] LMCLQ 379, 383.

registered. They are concerned to avoid incurring liability as a result of their participation in the market, whether this liability takes the form of rectification of the register (prohibited by Article 40(3)), an obligation to transfer non-specific EUAs (as permitted by Article 40(3)) or liability to pay monetary compensation (also permitted by Article 40(3)). Allowing EUAs to remain registered in their names while leaving them exposed to other forms of liability provides a very odd sort of comfort. In the context of land registration, it has been observed that 'it is a hollow victory for the registered proprietor to retain the land if they have to pay a sum equivalent to the value of the land in terms of ... compensation to the defendant.'¹⁴¹

If the EU truly wished to instill confidence in market participants, then it would do well to explore the viability of ensuring the conclusiveness of the register in the same way that many land registration schemes have provided. In order to do so, however, it would also have to seriously explore the situations in which this conclusiveness should be withheld. Where the register is not conclusive, the remedy of rectification is the most natural and straightforward. The rules permitting rectification of a unified register must themselves be unified. The EU must, in short, abandon the principle of subsidiarity. In doing so, it will simultaneously provide welcome clarity to market participants and provide the EU with an opportunity to optimise the EU ETS. As currently designed, the only party that truly benefits from the new Regulations is the European Commission since it operates the Union Registry and is essentially protected from any suit seeking rectification. Perhaps, a cynic might charge, that was always the point.

13,884 words

22 February 2015

¹⁴¹ Tang Hang Wu, 'Beyond the Torrens Mirror: A Framework of the In Personam Exception to Indefeasibility' (2008) 32 Melbourne University Law Review 672, 691. See also Elizabeth Cooke and Pamela O'Connor, 'Purchaser Liability to Third Parties in the English Land Registration System: A Comparative Perspective' (2004) 120 LQR 640 and Kelvin F K Low, 'The Nature of Torrens Indefeasibility: Understanding the Limits of Personal Equities' (2009) 33 Melbourne University Law Review 205.