FEDERAL COURT OF AUSTRALIA

DISTRICT REGISTRY: NEW SOUTH WALES

DIVISION: GENERAL

No NSD 734 OF 2018

On Appeal From a Single Judge of the Federal Court of Australia

ENCOMPASS CORPORATION PTY LTD

ACN 140 556 896

and another named in the Schedule Appellants

INFOTRACK PTY LTD ACN 092 724 251

Respondent

COMMISSIONER OF PATENTS

Interested Person

WRITTEN SUBMISSIONS OF THE COMMISSIONER OF PATENTS

Filed on behalf of the Commissioner of Patents, Commissioner of Patents

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AGS lawyer within the meaning of s 55I of the *Judiciary Act* 1903

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PART I THE GROUNDS OF APPEAL

- 1. The Commissioner confines herself to addressing manner of manufacture, which is raised by grounds 1 to 7 inclusive (**Grounds**) in the Amended Notice of Appeal. Thus, the Commissioner's submissions deal only with the matters raised in Part C of the Appellants' Outline of Submissions (**AOS**). The Grounds broadly identify two contentions.
- 2. As to the first contention: the Appellants advance the following propositions, which may be distilled from the Grounds. First, to constitute a manner of manufacture, an invention need only bring about an artificially created state of affairs the significance of which is economic: Ground 2. Secondly, subject to those criteria being satisfied, in the case of an invention implemented by use of a computer, the invention need only result in a new or enhanced use of a computer to constitute an 'improvement in a computer' and thus a new manner of manufacture: Ground 4; see also Ground 1. Thirdly, if the primary judge did not err in the application of existing authority (viz Research Affiliates LLC v Commissioner of Patents (2014) 227 FCR 378 (RA) and Commissioner of Patents v RPL Central Pty Ltd (2015) 238 FCR 27), that authority is wrong: Ground 6.
- 3. *As to the second contention*: the Appellants contend that the primary judge erred in his Honour's application of *RA*, *RPL* and *CCOM Pty Ltd v Jiejing Pty Ltd* (1994) 51 FCR 260: Grounds 3, 4, and 5; see also Grounds 1, 2 and 7.
- 4. The Commissioner respectfully submits that these contentions should not be accepted. For the reasons outlined below, they challenge well-established jurisprudence of manner of manufacture, and involve a mischaracterisation of the primary judge's reasons. In summary, to determine whether an invention is a manner of manufacture and thus proper subject matter for letters patent, attention must be directed to the substance of the claimed invention, not its form. This task is to be undertaken on a case-by-case basis. In the context of computer-implemented methods, a range of matters may be relevant, but a key consideration will be whether the ingenuity in the invention resides in the way in which the method is implemented in the computer, in which case it may be patentable, or whether that ingenuity lies in what is otherwise an unpatentable business method or scheme, in which case it will not be.

PART II MANNER OF MANUFACTURE JURISPRUDENCE

5. Section 18 of the *Patents Act 1990* (Cth) sets out the necessary conditions for a patentable invention: *Apotex Pty Ltd v Sanofi-Aventis Australia Pty Ltd* (2013) 253 CLR 284 per French CJ at 296; *D'Arcy v Myriad Genetics Inc* (2015) 258 CLR 334 per French CJ, Kiefel, Bell and Keane JJ at [11]-[12]. Among others, the invention must be 'a manner of manufacture within

- the meaning of section 6 of the Statute of Monopolies': s 18(1A)(a) of the Act (concerning innovation patents).
- 6. Within the corpus of authorities concerning manner of manufacture, National Research Development Corporation v Commissioner of Patents (1959) 102 CLR 252 (per Dixon CJ, Kitto and Windeyer JJ) is the locus classicus. The Court found thus. First (at 269), the relevant inquiry is whether the invention in issue is a proper subject of letters patent according to the principles which have been developed for the application of s 6 of the Statute of Monopolies. Secondly (at 275), to be a manner of manufacture, a process must offer some material advantage of economic value; viz it must belong to a useful art as distinct from a fine art. Thirdly (at 276), the mode or manner by which an invention provides some new and useful effect, and thus an improved result, may involve patentable subject matter. The new and useful result must be observable in 'something'; however, that 'something' need not be an article; it may be 'any physical phenomenon in which the effect, be it creation or merely alteration, may be observed'. Fourthly (at 277), in addressing the process the subject of the dispute before it, the Court answered the question it posed (see the *first* point above) by reference to the two conclusions it reached (identified in the second and third points above), observing that the process had 'as its end result an artificial effect' constituted in a 'product' (which is to say 'something') the significance of which is economic. Importantly, the Court cautioned (at 271) that 'any attempt to state the ambit of s 6 of the Statute of Monopolies by precisely defining "manufacture" is bound to fail and, further, 'to attempt to place upon the idea the fetters of an exact verbal formula... would be unsound to the point of folly'.
- 7. The Court in *NRDC* also affirmed (at 262) the application of the proposition illustrated by *Commissioner of Patents v Microcell Ltd* (1958) 102 CLR 232, that the use of a known substance for a new but analogous purpose, for which its known properties make it suitable, is not a proper subject of letters patent under these principles.
- 8. In *Myriad*, the High Court further considered the principles of manner of manufacture derived from *NRDC*. *Myriad* addressed three issues in particular: *first*, the need to focus on the substance of the invention and not its form (viz how it has been claimed); *secondly*, the meaning of 'artificial state of affairs'; and, *thirdly*, how to answer the question posed by the Court in *NRDC* (as to which see the *first* point in [6] above).
- 9. As to the first issue, *Myriad* makes plain that the way in which a claim is drafted cannot transcend the reality of what is in suit: monopolies are granted for inventions, not for the inventiveness of the drafting with which their applicants chose to describe them. Thus, the

matter must be looked at as one of substance, and effect must be given to the true nature of the claim: Gageler and Nettle JJ at [144]; see also French CJ, Kiefel, Bell and Keane JJ at [6], [87]-[88] and [94] and Gordon J passim, esp. [255]. At [145], Gageler and Nettle JJ cited RA with approval, where the Full Court said (at [107]) that an 'invention is to be understood as a matter of substance and not merely as a matter of form'. Thus '[i]f a claim drafted as a product claim is in truth a "'disguised' process claim", it will be treated as such' (at [145], citations omitted).

- 10. As to the second issue, Gageler and Nettle JJ observed, consistently with *NRDC*, that '[f]or a claimed invention to qualify as a manner of manufacture it must be something more than a mere discovery' and, further, '[t]he essence of invention inheres in its artificiality or distance from nature' and thus 'the question is whether the subject matter of the claim is sufficiently artificial, or in other words different from nature, to be regarded as patentable': [126]; see also [165]. Gageler and Nettle JJ also referred to *Microcell* as support for the proposition that the subject matter of a claim must have about it the quality of inventiveness; for known applications of known substances, novelty in the mode of use is to be distinguished from novelty of purpose: [131]. (Cf. Ground 4.)
- 11. As to the third issue, all members of the Court in Myriad held that NRDC was not expressing any 'test' by which the Courts are to assess whether a claimed invention is a manner of manufacture: French CJ, Kiefel, Bell and Keane JJ at [20]-[21]; Gageler and Nettle JJ at [166]-[167]; Gordon J at [172]ff. French CJ, Kiefel, Bell and Keane JJ unequivocally stated that the mere existence of a 'new and useful effect' being 'an artificially created state of affairs' providing economic utility does not 'mandate a finding of inherent patentability' (at [21]) and further that '[i]t was not intended as a formula exhaustive of the concept of manner of manufacture' (at [20]). Their Honours concluded (at [22]-[23]) that such an approach would be an 'unduly narrow characterisation of the effect of the decision in NRDC', i.e. 'to suggest that it establishes a "test" for patentability'. (Cf. Ground 2.) Instead, their Honours held that by reason of 'existing principle derived from the NRDC decision' various factors may be relevant. In so doing, their Honours held that NRDC 'authorised a case-by-case methodology' ([23]). See also Gordon J at [221], citing Apotex at [16]-[29]. Accordingly, the relevant inquiry remains that stated in NRDC: is the invention in issue a proper subject of letters patent according to the principles which have been developed – by the case law – for the application of s 6 of the Statute of Monopolies?

PART III COMPUTER IMPLEMENTED METHODS

- 12. In this case, the Full Court is asked to consider whether a particular computer-implemented method is a manner of manufacture. In previous cases, this has given rise to the question whether, having regard to the substance of the invention in suit, it is no more than a mere scheme which the Courts have never considered patentable.
- 13. Grant v Commissioner of Patents (2006) 154 FCR 62 warrants particular consideration. After declaring that the patent before it claimed "intellectual information", mere working directions and a scheme', at [47] the Full Court explained that what was missing was 'some [necessary] "useful product", some physical phenomenon or effect resulting from the working of a method for it to be properly the subject of letters patent'. The Court continued by stating that, '[w]hile a mere scheme or plan is not the proper subject of a patent, an alleged invention which serves a mechanical purpose that has useful results does not become such an unpatentable scheme or plan merely because the purpose is in the carrying on of a branch of business'. The Court also addressed early UK authority on computer implementations: see [18], discussing Burroughs Corp (Perkins') Application [1974] RPC 147 and International Business Machines Corporation's Application [1980] FSR 564 (UK decisions). These authorities were the subject of consideration in IBM v Commissioner of Patents (1991) 33 FCR 218, CCOM and Welcome Real-Time SA v Catuity Inc (2011) 113 FCR 110, each of which was also considered in Grant.
- 14. In *IBM* at 225-226, Burchett J regarded the algorithm in issue as conceptually analogous to the compounds considered in *NRDC*. Whilst observing that the mathematics were not new, his Honour stated that 'the application of the selected mathematical methods to computers, and, in particular, to the production of the desired curve by computer' was new and resulted in a 'commercially useful effect in computer graphics'. Notably, at 226, Burchett J held that the application 'involve[d] steps which are foreign to the normal use of computers and, for that reason... inventive'. This observation as to foreignness thus anticipated that of Gageler and Nettle JJ in *Myriad* at [164]-[165] (referred to in [10] above).
- 15. In *CCOM*, the Court held at 295 that *NRDC* 'requires a mode or manner of achieving an end result which is an artificially created state of affairs of utility in a field of economic endeavour' and found a method to assemble text in Chinese language characters for use in an apparatus to produce a Chinese language word processor to be patentable. In *Myriad* (at [21]), French CJ, Kiefel, Bell and Keane JJ compared the formulation in *CCOM* with 'the so-called vendible product "rule", which the Court in *NRDC* could only accept upon giving it its most

generous interpretation (see 276). In so doing, their Honours stated that *CCOM*'s formulation 'should be taken as a guide rather than as a rigid formula'. The Commissioner respectfully agrees. She also observes that, in reaching its conclusion, at 293, the Full Court in *CCOM* considered *IBM* and the UK decisions referred to therein (see [13] above), esp. *Burroughs* at 161. Accordingly, *CCOM* is illustrative of a case in which a computer program that has the *effect of controlling computers to operate in a particular way* has been held proper subject matter for letters patent, consistently with *NRDC*: see *Data Access Corporation v Powerflex Services Pty Ltd* (1991) 202 CLR 1 per Gleeson CJ, McHugh, Gummow and Hayne JJ at [20]. (Gummow J was on the bench that decided *CCOM*.) See also *RA* at [75], citing *CCOM*, where the Full Court's reasoning conforms with *Data Access*.

- 16. *CCOM*, then, was concerned with a new method that affected the operation of an apparatus in physical form in contrast to one that merely used a computer to implement a scheme. Importantly, in *CCOM*, the Court required more than the mere satisfaction of a two-limbed 'test' and its approach to manner of manufacture is consistent with more recent Full Court authority, notably *RA* and *RPL* (cf. AOS, *passim*, but esp. [32]).
- In *Catuity*, a first instance decision, Heerey J discussed the approach taken in *CCOM*, *IBM* and the UK decisions (see [116]-[128]). His Honour did not accept (at [128]) that a 'physically observable effect' was necessarily required. However, the Full Court in *Grant* of which Heerey J was a member subsequently held (at [32]) that 'a physical effect in the sense of a concrete effect or phenomenon or manifestation or transformation is required', stating of the invention in *Catuity* that '[w]hile there was not a physically observable end result in the sense of a tangible product, the invention involved an application of an inventive method where part of the invention was the application and operation of the method in a physical device', consistently with *NRDC* (see *Grant* at [30]; see also *RA* at [94]).

PART IV RA AND RPL

- 18. *RA* and *RPL* are the two most recent Full Court decisions concerning computer-implemented inventions. The Commissioner respectfully submits that the Appellants' attack on them is unwarranted. Properly understood, these authorities represent orthodox applications of the developed principles of manner of manufacture to computer-implemented methods. Indeed, the High Court refused an application for special leave to appeal from the decision in *RPL* on the basis that 'the Full Court was plainly correct': see [2016] HCASL 84. (Cf. Ground 6.)
- 19. The Commissioner submits that the following propositions emerge from RA and RPL.

- 20. *First*, the Court must decide, as matter of substance not form, whether the claimed invention is proper subject matter for a patent: *RPL* at [99]; *RA* at [106], [117]. This requires consideration of both the claims and the body of the specification: *RPL* at [114].
- 21. **Secondly**, the assessment is not done mechanically pursuant to precise guidelines. It is a question of understanding what has been the work of, the output of, and the result of, human ingenuity and then applying the developed principles: *RA* at [116]; *RPL* at [112].
- Thirdly, a distinction exists between a technological innovation and a business innovation. The former is patentable; the latter is not: *RA* at [93]; *RPL* at [100]. Thus a business method or scheme is not, *per se*, a proper subject for letters patent: *RPL* at [96]. Nor are abstract ideas, mere intellectual information or mere directions for use: *RA* at [101]; *RPL* at [100].
- 23. Fourthly, a computerised business method or scheme can, in some cases, be patentable. However, '[w]here the claimed invention is to a computerised business method, the invention must lie in that computerisation': RPL at [96]. This requires 'some ingenuity in the way in which the computer is used': RPL at [104]. It is not a patentable invention 'to simply "put" a business method "into" a computer to implement the business method using the computer for its well-known and understood functions': RPL at [96]. The Commissioner observes that there is an affinity between this approach and the proposition illustrated by Microcell, referred to in NRDC at 262 and by Gageler and Nettle JJ in Myriad at [131], that the use of a known substance for a new but analogous purpose, for which its known properties make it suitable, is not a proper subject of letters patent under the established principles.
- 24. *Fifthly*, an invention must be examined to ascertain whether it is in substance a scheme or plan, or whether it can broadly be described as an improvement in computer technology: *RPL* at [96]. In conducting this analysis, it may be useful to: (i) ascertain whether the contribution is technical in nature: *RPL* at [99], *RA* at [114]; (ii) consider whether the invention solves a 'technical' problem within or outside the computer: *RPL* at [99], *RA* at [103]; (iii) consider whether the invention results in an improvement in the functioning of the computer, irrespective of the data being processed: *RPL* at [99], *RA* at [118]; (iv) consider whether the invention requires 'generic computer implementation', as distinct from steps 'foreign' to the normal use of computers: *RPL* at [99], [102]; *RA* at [101]; and (v) consider whether the computer is merely the intermediary, configured to carry out the method using program code for performing the method, but adding nothing to the substance of the idea: *RPL* at [99].

25. *Sixthly*, the circumstance that a business method or scheme cannot be implemented without using a computer does not, of itself, provide patentability: *RPL* at [102]-[104]. The speed and power of computers make them a fast and efficient tool for businesses, and few business processes today are performed without the use of a computer: *RPL* at [85]. Where a business method or scheme is implemented by using a computer to perform its ordinary functions, the claimed invention 'is still to the business method itself' and therefore unpatentable: *RPL* at [104]. Similarly, the physical effects that computers generate by ordinary computational processes, such as displaying an object on a screen, are not, of themselves, sufficient to render a computerised business method or scheme patentable: *RA* at [105]-[106], [114]. As *RA* and *RPL* make plain, it is insufficient when assessing a computer-implemented invention merely to ask whether the claimed invention satisfies the two limbs identified in *NRDC* of (1) an 'artificially created state of affairs' and (2) utility in the field of 'economic endeavour'.

PART V APPELLANTS' SUBMISSIONS

- 26. The Commissioner respectfully submits that the reasoning in *RA* and *RPL*, as outlined above, is consistent with *NRDC* and *Myriad*, and that the primary judge was correct to find that the application of those authorities led to the conclusion that the invention claimed in each patent in suit is not a manner of manufacture. The Appellants' arguments to the contrary should not be accepted. Some specific responses to the Appellants' submissions follow.
- As to AOS [13]-[14], there is no inconsistency between *Grant* and *CCOM*. To the extent that there is an inconsistency between *Grant* and *Catuity* as to whether a 'physical effect' is required, *Grant* is to be preferred; *Catuity* is inconsistent with *NRDC* and, on this issue, ought to be rejected. See [17] above. The Appellants' argument that it is enough for a 'physical effect' to be 'embodied by electronic processes in a computer system' should not be accepted. Such an approach is dangerously apt to render patent eligible a wide class of inventions that have never been so including a computer implementation of the 'invention' in *Grant*.
- 28. At AOS [18]ff, the Appellants speculate as to whether *RA* imported from US jurisprudence the 'machine or transformation test'. This provides that a claimed invention is not patentable if it is not tied to a machine and does not transform an article: *Bilski v Kappos* 561 US 593 (2010) and *Alice Corporation v CLS Bank International* 573 US (2014). The Appellants' speculation is without warrant: the Full Court did not engage in the exercise attributed to it. Moreover, contrary to AOS [22], the passages of *NRDC* relied on by the Full Court constitute the High Court's summation of arguments and reasoning which it accepted. The Appellants' criticism of the Full Court's reasoning at AOS [26] is similarly misplaced.

- 29. At AOS [23], the Appellants refer to *CCOM*. As the High Court in *Data Access* stated at [20], *CCOM* confirms that 'claims to computer programs... which have the effect of controlling computers to operate in a particular way, [may be]... held to be proper subject matter for letters patent, as "achieving an end result which is an artificially created state of affairs of utility in the field of economic endeavour", within the meaning of *NRDC*. *CCOM* does not stand for the proposition that an invention need only bring about an artificially created state of affairs, the significance of which is economic, to constitute a manner of manufacture.
- 30. At AOS [27]-[31], the Appellants criticise *RPL* (at [104]) by suggesting a possible 'conflict' or 'tension' with *CCOM*, where none exists. At [104] the Full Court in *RPL* observed that a 'computer-implemented business method can be patentable where the invention lies in the way in which the method is carried out in the computer' and that '[t]his necessitates some ingenuity in the way in which the computer is utilised'. Thus, the Full Court identified where the relevant ingenuity is to be found. See *NV Philips Gloeilampenfabrieken v Mirabella International Pty Ltd* (1995) 183 CLR 655 at 663-665; *Myriad* per Gageler and Nettle JJ at [125]-[131]. See also *RPL* at [111]. The Commissioner submits that the Full Court was correct. Contrary to AOS [28], the Court was not rejecting the proposition that manner of manufacture, novelty, inventiveness and utility are distinct requirements (cf. AOS [30]).
- 31. As to AOS [32]-[33], the Appellants state that 'the primary judge properly concluded that the invention claimed in the Patents satisfied the "test" in NRDC' namely it brings about an artificially created state of affairs the significance of which is economic. AOS [33] asserts that this ought to have been 'enough' to satisfy manner of manufacture. Thus, the Appellants advance the proposition that the 'test' is a rigid formula the application of which conforms with *CCOM*. With respect, this is incorrect. The primary judge's inverted commas, like those deployed in *Myriad*, indicate that a rigid application of the 'test' ought to be 'denounced' for resting 'upon an unduly narrow characterisation of the effect of the decision in NRDC': *Myriad* at [21]-[22]. The approach of the High Court in *NRDC* to Morton J's 'rule' is comparable (*Myriad* at [21] and at [119] citing *Grant* at [12]). *RA* at [102] is correct.
- 32. As to AOS [33]-[35], the Appellants treat the primary judge's attempts to ascertain 'the qualities of the invention before the court' (*Myriad* at [21]) e.g. can the computer perform a function which before it could not (like *IBM*); is its efficiency improved (like *CCOM*) as declarations of hard categories into which computer-implemented methods are to be pigeonholed if they are to be declared manners of manufacture. The primary judge was not so engaged. Rather, consistently with the case-by-case approach endorsed by the High Court, his

- Honour assessed whether the patents before him disclosed the mere use of a computer to implement a business method or something more, viz something 'foreign' to the normal use of computers. His Honour did not apply the machine or transformation test (cf. AOS [34]).
- 33. At AOS [36]-[37], the Appellants criticise the primary judge for having impermissibly incorporated considerations of inventive step and then, further, for failing to incorporate them properly (by mosaicking). These criticisms are unfounded. His Honour was considering inventiveness or ingenuity in the context of manner of manufacture, not inventive step. The references to *Minnesota Mining* and *Alphapharm* (which should be 293 and [41] respectively) are not to the point. Further, Perram J did not articulate a 'test' (the High Court's inverted commas) departing from *NRDC* as applied in *CCOM*; these cases do not supply a 'test'.
- 34. As to AOS [38], the 'asserted "effect" to which the Appellants refer is unclear and the decisions are unidentified. In any event, the Commissioner seeks to apply the law on manner of manufacture developed and applied in NDRC, Myriad, Grant, RA, RPL &c, as explained above. These authorities do not require the application of special rules to the assessment of business method or software patents, viz 'the machine or transformation test'. Nor do they advocate the coalescence of novelty, inventive/innovative step and manner of manufacture.
- 35. As to AOS [39], the Commissioner is unable to identify any decision of any Australian Court in which it has been stated that the 'the machine or transformation test' is 'the sole test for business and software patents'. If by 'the principles in CCOM' the Appellants intend a narrow articulation of a 'test' corresponding with Ground 2, the Commissioner respectfully submits that this Court should decline to make the 'affirmation' sought for the reasons outlined above.
- 36. As to AOS [40]-[41], the Commissioner embraces the statement of the Full Court in *RA* at [107] that 'the invention is to be understood as a matter of substance and not merely as a matter of form' (cited with approval by Gageler and Nettle JJ in *Myriad* at [144]). Drafting cannot 'transcend the reality of what is in suit' and the Commissioner asks this Court to assess the Appellants' patents with those statements in mind (*Myriad* at [145]). See also [9] above. The question is not whether the claim is defined by steps that 'have the character of specific computer functionality' but whether, in substance, the claimed invention is the proper subject of letters patent (cf. AOS [41]).
- 37. As to AOS [42], the Commissioner respectfully disagrees with any proposition that, in this context, the Courts cannot have regard to the prior art. See *Myriad* at [12]; *NRDC* at 264. Further, the Appellants' contention that computer-implemented methods are to be assessed

against whether or not the method is embodied in computer technology that can be *used in* a business is, with respect, wrong. It is not supported by the authorities, including *Catuity*, in which the language in issue constitutes no more than *obiter* description of the commercial background to the patent there in suit. If, however, Heerey J's observation be capable of elevation beyond *obiter* description, in the Commissioner's submission it ought be rejected.

38. As to AOS [43]-[44], the question posed by the Court in *NRDC* (see the *first* point in [6] above), does not invite the creation of categories, into which a computer-implemented method must fall, or which it must avoid, in order to satisfy s 6 of the *Statue of Monopolies* (e.g. whether it constitutes 'a combination of functions performed by a computer' or provides 'an enhanced user experience'), and the primary judge did not posit one (the improvement of computer 'efficiency'). Nor does it invite a comparison between a claimed invention and another patentable invention and the declaration, 'if that one was patentable, this one should be too'. The task of the Court is to ascertain 'the qualities of the invention' by reference to its substance, not its form, to determine where the ingenuity in the invention resides.

PART VI CONCLUSION

39. The Commissioner respectfully submits that the Full Court should affirm the reasoning in *RA* and *RPL*.

17 October 2018

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Schedule

FEDERAL COURT OF AUSTRALIA

DISTRICT REGISTRY: NEW SOUTH WALES

Division: General

No NSD 734 of 2018

Appellants

Second Appellant

SAI Global Property Division Pty Ltd

ACN 089 872 286

Date: 17 October 2018