CA-2023-[ ]
Appeal No. CH-2022-000144

IN THE COURT OF APPEAL
ON APPEAL FROM THE BUSINESS AND PROPERTY COURTS OF ENGLAND AND WALES
INTELLECTUAL PROPERTY LIST (ChD)
PATENTS COURT (SIR ANTHONY MANN)

B E T W E E N :

EMOTIONAL PERCEPTION AI LIMITED

Respondent

-and-

COMPTROLLER GENERAL OF PATENTS

Appellant

GROUNDS OF APPEAL

Ground 1: the Judge erred in holding that the exclusion from patent protection for "a program for a computer … as such" was not engaged

1. The Judge correctly recorded (at [22]) the claims define a computer-implemented invention and that the Artificial Neural Network (ANN) included in the claims may be embodied in software or hardware. A computer-implemented invention, when claimed as such, seeks protection for embodiments implemented in hardware, in software, or in a combination of hardware or software.

2. The Judge correctly observed (at [23]) the ANN defined in the claims may take the form of a dedicated hardware unit (in the case of a hardware embodiment) or it may be implemented ("*emulated*") by running appropriate software on the general-purpose computer which is the subject of the claims (in the case of a software embodiment). Further, the Judge correctly recognised, at least implicitly, that a claim to a computer-implemented invention (protecting hardware and software embodiments) should be assessed as a matter of substance not form when applying the exclusion to a program for a computer (see [56] and [78]).

3. For a computer-implemented invention, the principle of substance not form means it is inappropriate to make a distinction between embodiments of the same (claimed) invention carried out in hardware or software, as what is decisive is whether a technical contribution is revealed.

4. The judge erred in applying this principle. In the circumstances in which a claim is directed to a computer-implemented invention that includes an ANN, the invention being implemented in hardware or software (or a combination thereof), the Judge should have held that the claims were directed to "*a program for a computer … as such*", the exclusion was engaged, and the question of technical contribution should be asked. Instead, he wrongly concluded (at [61]) that the computer-implemented invention of the claims does not invoke the program exclusion and wrongly stated (at [63]) that it was not necessary, as a matter of law, to consider the question of technical contribution.

5. As such the Judge was wrong to find that the ANN can be 'decoupled' from the computer software emulating the ANN (as he did at [56]-[59]) and was therefore wrong to construe the claim as going beyond a computer program such that "*as a matter of construction the claim not to a computer program at all*".

6. Further, or alternatively, insofar as the Judge found that the ANN could be 'decoupled' from the computer software emulating the ANN the Judge should have held that the 'decoupled' ANN was excluded as a mathematical method.

7. Yet further, and/or in a further alternative, the Judge was wrong to rely (as he did at [56]) on the Appellant's 'concession' as regards hardware implemented ANNs as a basis for holding that the software implemented ANN is not operating a program.

Ground 2: the Judge was wrong to rely on the Appellant's 'concession'

8. Paragraph 7 above is repeated. The Judge was wrong to rely (as he did at [56]) on the Appellant's 'concession' as regards hardware implemented ANNs as a basis for

holding that the software implemented ANN is not operating a computer program or otherwise caught by the computer program exclusion.

9. The Appellant's 'concession' was that where a (hypothetical) hardware-only claim includes an ANN (e.g. when the claimed invention is implemented in dedicated or special-purpose electronic circuitry, or when embodied in hardware on an integrated circuit), that is to say where the claim is *not* directed to a computer-implemented invention, it was likely the computer program exclusion is not engaged.

10. However, the computer program exclusion was likely not to be engaged by such hardware-only claims because an invention (whether or not it involves an ANN) implemented in hardware-only form neither requires a computer program for its implementation, nor encompasses a software-only form. It does not follow that a computer-implemented invention (whether or not it involves an ANN), whose claim necessarily encompasses software executed on a general-purpose computer (among other things), is therefore outside the scope of the exclusion. The exclusion is not to 'hardware' or 'software' but to a program for a computer.

Ground 3: the Judge was wrong to exclude the consideration of the mathematical exclusion model

11. Paragraph 6 above is repeated. The Hearing Officer held (at paragraph 63 of the Decision) that insofar as the ANN can truly be decoupled from the software platform that supports it in the way that the Applicant suggested, then it relates wholly to a mathematical method.

12. The Applicant did not appeal this finding. On the contrary the Applicant sought to rely (at paragraph 107) of its Skeleton Argument on the Hearing Officer's finding that the mathematical exclusion did not apply because the ANN could not be so decoupled from its specific application as part of a file recommendation engine (i.e. the software platform that supports the emulated ANN).

13. As the Judge records at [32]-[33], the Judge invited the parties to provide further submissions on what he referred to as "two fundamental questions" which questions were not thrown up in the manner in which the matter was presented to

the Hearing Officer and so not addressed clearly in the Decision. It follows that these were not matters that were addressed in terms in the Applicant's Grounds of Appeal nor its Skeleton Argument.

14. In the premises the Judge was wrong to preclude the Comptroller from advancing in its further written submissions an argument that insofar as the ANN can truly be decoupled from the software platform that supports it, then the decoupled ANN relates wholly to a mathematical method on the basis that it had not advanced such an argument by way of a Respondent's Notice and/or to deny the Comptroller the opportunity to apply file a Respondent's Notice to raise that issue.

Ground 4: the Judge was wrong to hold that the claimed invention involves a substantive technical contribution

15. The Judge held (at [76]) that the transmission of a file was capable of constituting a 'technical' contribution because the file had been identified and then moved "because it fulfilled certain criteria".

16. However, the mere fulfilment of subjective (or semantic) criteria is not sufficient to amount to a technical contribution and file transfer itself is entirely conventional. In the premises selecting a file based of semantic criteria and transferring that file using entirely conventional means cannot amount to a technical contribution.