

The Federal Circuit affirmed a decision finding that patents directed to virtual slot machines were invalid as improper means-plus-function claims and as being directed to an abstract idea.

Failure to disclose an algorithm performing the function recited in means-plus-function claim limitations can not only fail the requirement to disclose the structure for performing that function (in this case, an algorithm) set out in *WMS Gaming, Inc. v. Int'l Game Tech.*, 184 F.3d 1339 (Fed. Cir. 1999) and its progeny, but such failure to disclose can also render the claims patent ineligible for failure to disclose the inventive concept from the test laid out in *Alice Corp. Pty. v. CLS Bank Int'l*, 573 U.S. 208 (2014).

Konami Gaming, Inc. (“Konami”) sued High 5 Games, LLC (“High 5”) for infringement of four patents directed to an alleged improvement to the functioning of virtual slot machines. Specifically, the patents were directed to using a number of consecutively displayed reel symbols from one round in a subsequent round to increase user interest and odds of winning. All four patents were related and shared substantially similar specifications. High 5 moved for summary judgment of invalidity on two grounds: (1) improper functional claiming without disclosure of a corresponding structure under 35 U.S.C. § 112; and (2) failure to claim patentable subject matter because the claims were directed to an abstract idea.

As to High 5’s first argument, while the patents never used the word “means,” the Court nonetheless found that the claims recited several functions. For example, the Court found that the claims required displaying a matrix, maintaining an identifiable subset of symbols, pre-selecting symbols, determining the winning arrangement of symbols, randomly determining when the “consecutive run of identical symbols” will be part of the winning combination, and increasing the probability of a winning outcome. The Court found that these functions were to be performed by a variety of generic computer elements that did not connote specific structure, such as a processor, a game controller, and a control module. The Court found the claims invalid because the specification of the patents failed to disclose any algorithm or flow-chart that would demonstrate to one of skill in the art how these proposed functions were to be performed.

As to High 5’s second argument, the Court noted that virtual slot machines inherently rely on randomly selecting and displaying symbols, and that Konami’s claimed method of altering

this arrangement was nothing more than the abstract idea of changing the rules of the game. The Court also found that the claims did not pass the inventive concept element of the *Alice* test because they posed nothing more than “purely conventional steps to an abstract idea.” The Court noted that Konami’s failure to disclose its algorithm was fatal under both the *WMS* and *Alice* tests. Had the patentee disclosed the algorithm, not only would it have been able to demonstrate a corresponding structure, but it also would have been able to rely on the algorithm to demonstrate the claims were not merely directed to an abstract idea by demonstrating the claimed improved functioning.