CARDIONET, LLC v. INFOBIONIC, INC., Appeal No. 2019-1149 (Fed. Cir. April 17, 2020). Before Dyk, Plager and Stoll. Appealed from D. Mass. (Judge Talwani).

Background:

CardioNet sued InfoBionic for infringement of its patent directed to a cardiac monitoring system for detecting and distinguishing atrial fibrillation and atrial flutter from other types of cardiac arrhythmia. The claimed system requires the use of conventional technology to detect and measure electrical signals of the heart, and the measured signals are used to determine variations in the beat-to-beat timing of the patient's heart rate. In particular, the system analyzes an electrocardiogram to determine variations between R to R intervals formed between ventricular contractions (i.e., QRS complexes 215, 220, 225 in Fig. 2). In this way, the system determines whether a patient is experiencing atrial variations, and then issues an alert to staff when atrial variations are determined to occur.

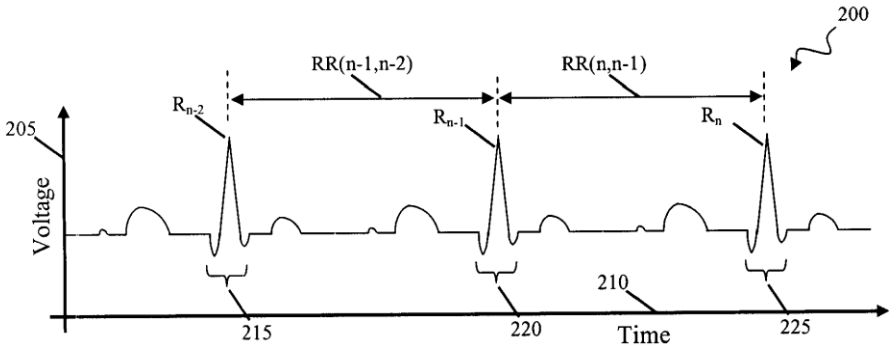

FIG. 2

InfoBionic filed a motion to dismiss for failure to state claim, alleging that the patent was directed to patent-ineligible subject matter under 35 U.S.C. § 101. The district court agreed with InfoBionic and dismissed the case, finding that the claims were directed to an abstract idea, and thus, did not constitute patent-eligible subject matter.

Issue/Holding:

Did the district court err in finding that the claims were not directed to patent-eligible subject matter? Yes, reversed and remanded.

Discussion:

The Federal Circuit reversed the district court's holding, and held that the claims were not directed to an abstract idea, and instead were directed to a patent-eligible improvement to cardiac monitoring technology. In making this determination, the Federal Circuit considered the claim language and found that "it is difficult to fathom how doctors mentally or manually used 'logic to identify the relevance of the variability [in the beat-to-beat timing] using a non-linear function of a beat-to-beat interval'," as required by one of the asserted claims. In addition, the Federal Circuit considered the written description, which described benefits of the claimed invention over conventional solutions. For example, the description indicated that the system has "increased clinical significance" in delivering fewer false positive or false negative indications. Furthermore, the Federal Circuit noted that neither the written description, nor the record as a whole, supported the assertion that doctors performed the claimed techniques when diagnosing atrial fibrillation or atrial flutter. Based on these findings, the Federal Circuit found that the claimed system was in compliance with § 101.