**Claim rejection under 35 USC 112**

**The following is a quotation of the first paragraph of 35 U.S.C. 112(a):**

(a) IN GENERAL.—The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains,or with which it is most nearly connected, to make and use the same,and shall set forth the best mode contemplated by the inventor or joint inventor of carrying out the invention.

**The following is a quotation of 35 U.S.C. 112(b):**

(b) CONCLUSION.—The specification shall conclude with one or more claims particularly pointing out and distinctly   
claiming the subject matter which the inventor or a joint inventor regards as the invention.  
The following is a quotation of 35 U.S.C. 112 (pre-AIA), second paragraph:The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-19 are rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA),second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor,

**Regarding claim 1**. A computer implemented method comprising:  
communicating, by one or more processors, at least a portion of prescription data stored in a first portion of memory, to a prescription payer software application;  
receiving, by the one or more processors and in response to the communicating, prescription benefit response data from the prescription payer software application;  
storing, by the one or more processors, the prescription benefit response data in the first portion of the memory;  
generating, by the one or more processors, machine learning request data from the prescription data and the prescription benefit response data for input into a machine learning model that is trained to predict payback forecast data corresponding to the machine learning request data and based on historical prescription data and historical payback data;  
storing, by the one or more processors, the payback forecast data predicted by the trained machine learning model in a second portion of the memory; and  
generating, by the one or more processors, an output message for a computer based on the payback forecast data satisfying a configurable threshold.   
   
**Regarding claim 2**. The computer implemented method of claim 1, further comprising communicating the machine learning request data to a webservice coordinator software program in data communication with the machine learning model, wherein the webservice coordinator software program and the machine learning model are implemented on cloud connected network servers.   
   
**Regarding claim 3**. The computer implemented method of claim 2, further comprising confirming accuracy of the machine learning request data with the webservice coordinator software program prior to transmitting the machine learning request data to the machine learning model.   
   
**Regarding claim 4**. The computer implemented method of claim 3, wherein the webservice coordinator software program transmits the machine learning request data to a machine learning middleware endpoint in data communication with the machine learning model.   
   
**Regarding claim 5**. The computer implemented method of claim 4, wherein transmitting the machine learning request data comprises transmitting the machine learning request data to the webservice coordinator software program in predetermined message types that include routing information for responses.   
   
**Regarding claim 6**. The computer implemented method of claim 1, wherein communicating machine learning request data comprises communicating the machine learning request data to a remuneration advisor webservice implementing the machine learning model in a cloud-based network of servers.   
   
**Regarding claim 7**. The computer implemented method of claim 6, further comprising using the one or more processors to implement a pre-edit transmit function and a post-edit request function.   
   
**Regarding claim 8**. The computer implemented method of claim 7, further comprising using the pre-edit transmit function to communicate at least a portion of the prescription data to a prescription payer software application and to receive a prescription benefit response from the prescription payer software application.   
   
**Regarding claim 9**. The computer implemented method of claim 7, further comprising using the post-edit request function to communicate the machine learning request data to the remuneration advisor webservice in a JSON POST action.   
   
**Regarding claim 10**. The computer implemented method of claim 9, further comprising using the post-edit request function to initiate a remuneration advisor webservice call to the machine learning model.   
   
**Regarding claim 11**. The computer implemented method of claim 10, further comprising using the remuneration advisor webservice to format the machine learning request data for use with the machine learning model.   
   
**Regarding claim 12**. The computer implemented method of claim 1, further comprising, after calculating the payback forecast data for the prescription data, returning direct and indirect remuneration (DIR) fee data.   
   
**Regarding claim 13**. The computer implemented method of claim 12, further comprising returning the DIR fee data for risk of DIR fees, amount of DIR fees, and/or reason for DIR fees and using the one or more processors to determine mitigation procedures to reduce the DIR fees.   
   
**Regarding claim 14**. The computer implemented method of claim 1, further comprising transmitting the payback forecast data to a web service coordinator software program and using the web service coordinator program to build the output message with the payback forecast data.   
   
**Regarding claim 15**. An apparatus comprising:  
a computer storing prescription data;  
a computer-readable medium storing computer executable instructions that when executed by the computer cause the computer to:  
communicate, by one or more processors, at least a portion of the prescription data stored in a first portion of memory, to a prescription payer software application;  
receive by the one or more processors, a prescription benefit response from the prescription payer software application;  
storing, by the one or more processors, the prescription benefit response data in the first portion of the memory;  
generate with the one or more processors machine learning request data from the prescription data and the prescription benefit response, for input into a machine learning model that is trained to predict payback forecast data corresponding to the machine learning request data and based on historical prescription data and historical payback data;  
storing, by the one or more processors, the payback forecast data predicted by the trained machine learning model in a second portion of the memory; and  
generating, by the one or more processors, an output message for a computer display based on the payback forecast data satisfying a configurable threshold.   
   
**Regarding claim 16**. The apparatus of claim 15, further comprising returning, within the payback forecast data, respective predictions for risk of direct and indirect remuneration (DIR) fees, amount of direct and indirect remuneration (DIR) fees, and/or reason for direct and indirect remuneration (DIR) fees.   
   
**Regarding claim 17**. The apparatus of claim 15, further comprising storing the payback forecast data, the prescription data, and the prescription benefit response in a training database.   
   
**Regarding claim 18**. A computer-readable medium storing computer-executable instructions that when executed by the at least one processor implement a computerized application to:  
communicate with the at least one processor at least a portion of the prescription data stored in a first portion of memory to a prescription payer software application;  
receive by the at least one processor a prescription benefit response from the prescription payer software application;  
generate, with the at least one processor, machine learning request data, from the prescription data and the prescription benefit response, for input to a machine learning model that is trained to predict payback forecast data corresponding to machine learning request data based on historical prescription data and historical payback data;  
storing, by the one or more processors, the payback forecast data predicted by the trained machine learning model in a second portion of the memory; and  
generate, by the one or more processors, an output message for a computer display based on the payback forecast data satisfying a configurable threshold.   
   
**Regarding claim 19**. The computer-readable medium of claim 18, further comprising data entry applications programmed to receive the configurable thresholds and building the output message with the payback forecast data after evaluating the thresholds.   
   
**Regarding claim 20**. The computer-readable medium of claim 19, further comprising displaying the output message on the computer display with recommendations for reducing payback fees.