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(54) **Title:** SYSTEMS AND METHODS OF PH MODELING AND CONTROL

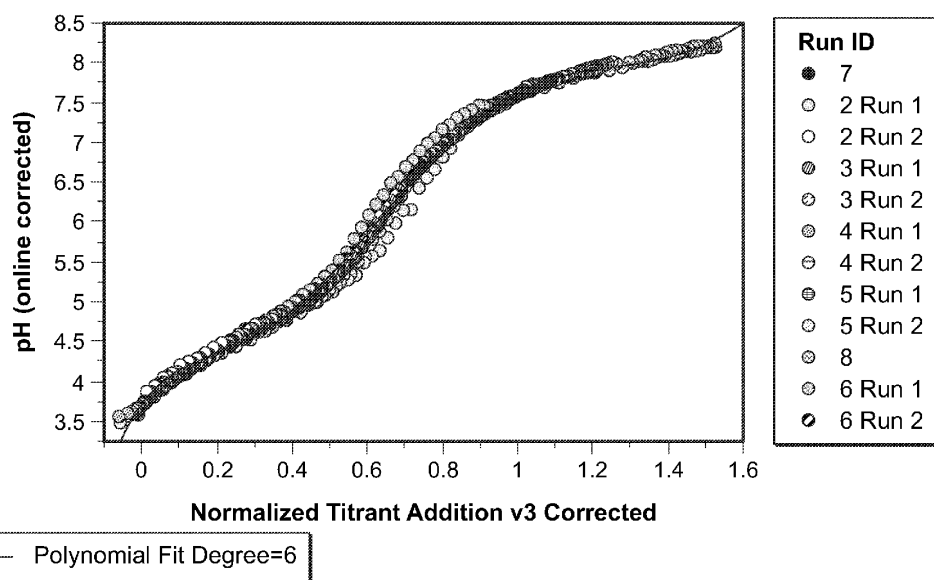


FIG. 10

(57) **Abstract:** The disclosure relates to systems and methods for controlling the pH of a sample, comprising measuring an initial pH, adding an amount of titrant and measuring a second pH, and using non-dimensional modeling to normalize titrant and determine the amount of titrant needed to reach a final pH. The systems and methods can be used to control pH during viral inactivation or titration of protein samples.

[Continued on next page]

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