2016 Giles S. Rich Memorial Moot Court Problem

This case involves an appeal from a final decision of the Patent Trial and Appeal Board in an *Inter Partes* Review proceeding captioned Billary v. Shrub.

Clint Billary filed a petition before the USPTO to institute an *Inter Partes* Review of claims 1 and 10 of US Patent 8,537,303. Billary argued that claim 1 was obvious over an article by Billary published just before the patent was filed and that claim 10 was anticipated over an earlier patent publication to Sandy Bernard. The inventor of the US Patent 8,537,303, G.O.B. Shrub, had previously disclosed the subject matter of the patent and attempted to disqualify Billary's article as prior art by arguing Shrub's earlier disclosure put Billary's article within the exception of 35 U.S.C. § 102(b)(1)(B) (post-AIA). Shrub further argued that the Bernard patent publication did not meet each and every element of claim 10 under a broadest, reasonable interpretation of that claim. The Board ruled in favor of Billary and canceled claims 1 and 10.

Pursuant to 28 U.S.C. § 1295(a)(4)(A) & 35 U.S.C. § 141(c), Shrub filed this appeal in the United States Court of Appeals for the Federal Circuit, seeking to reverse the Board's cancellation of claims 1 and 10. The appeal was docketed as Appeal No. 15-9999. On appeal the parties stipulated to arguing only two issues: 1) the status of the Billary Article as prior art under the America Invents Act; and 2) the proper construction of claim 10, insofar as both issues control validity of claims 1 and 10. The USPTO waived rights to participate in the appeal as an intervener.

Record Facts

The record on appeal is generally confined to the facts presented herein. Any fact not recited is without support, except that clearly established, general facts consistent with this record may be judicially noticed.

Technological background

State and county officials have sought to generally improve the voting experience In the face of declining voter turnout, concerns over voter fraud, and technical difficulties in counting votes in elections. These officials have largely turned to technology for

solutions, especially electronic voting machines. In turn, innovators have designed new voting machine technology to compete for this demand.

One issue underlying lower voter turnout in particular is a lack of enthusiasm and political awareness among the electorate. Citizens complain that voting often feels like a chore - becoming educated on issues and understanding positions taken by the myriad candidates requires large amounts of attention and research. The physical act of voting often means having to set aside time on a workday, gather appropriate identification, and wait in an uncomfortable line to deal with unfamiliar and potentially glitchy voting equipment. Many voters feel that their individual ballot has only a tiny impact on an election result. Thus, citizens often conclude that the time they would spend voting is better spent on other matters, including entertainment and socializing.

A separate, technical issue underlying problems with electronic voting machines is decalibration of input devices, like touchscreens, on the machines. A voter may select one candidate or option, but when decalibrated, the electronic voting machine selects another candidate or option. In extreme circumstances decalibrated voting machines display incorrect selections and even inaccurately record votes after different user input has been entered. Household items, including magnetized and electronic handheld devices, have been known to cause such decalibration. Thus, much decalibration occurs accidentally; however, there are concerns about voter fraud by purposefully causing decalibration in an opponent's stronghold precincts.

Enter G.O.B. Shrub (hereinafter "Shrub"), entrepreneur and inventor. Shrub came up with a social-network-enabled voting device that interacts with a voter's online social network to suggest or even "auto-vote" for candidates and issues, as well as post voter activity to voters' networks. The social network interface has increased voter turnout and enthusiasm, making voters more engaged in the voting process and feel like they voted "correctly" without much research into issues or candidates. ~~Shrub also devised a~~ security system that protects against decalibration and alerts poll workers and voters when decalibration has occurred. The security system uses a special touchscreen material and comparison software to determine when a machine is decalibrated. Upon

detecting decalibration, the machine alerts the voter or poll worker through a color change and halts further use of the electronic voting machine until re-calibrated. Shrub filed a patent application on these voting machine inventions on April 18, 2013 under the Prioritized Examination Program, which issued as US Patent 8,537,303 (hereinafter "the '303 Patent") on October 1, 2013.

The '303 Patent

The '303 Patent states in its written description that "disclosed herein are several example voting machines that solve problems long-existing in the democratic process and in electronic voting machines." In a first example, the detailed description section of the '303 Patent discusses a voting machine with an input fidelity security system. Part of the security system is a flexible electromagnetic shield incorporated in the touch screen with associated software, described as such (reference characters omitted):

> Using a comparison program as a submodule of the machine operation program discussed above . . . in any language, such as Java, C++, Python, .Net frameworks, etc. . . , the machine checks that the touch screen, which is designed to store and display the ballot form, will accurately record a finger tap at the indicated position next to a candidate or issue. An error in calibration may be detected by a discrepancy in the shield's input voltage and the screen's registered output. . . When the machine finds an error in calibration, such as when a calibration tap does not result in a correctly displayed or stored ballot form, the software program alerts the user. For example, the software may change the touch screen, for example, from the original color used in the touch screen to its complementary color, such as red to green, violet to yellow, or blue to orange, to indicate the decalibration. The machine then remains in this state and stops registering additional input or casting a ballot until recalibrated.

In a second example, the detailed description of the '303 Patent describes a social network-enabled function to automatically vote for a voter or recommend how the voter should vote. An excerpt of this example is given below (reference characters omitted):

> The machine is configured to connect to social networks in order to harvest political preference information about contacts of the voter in the social networks. For example, the voting machine may be connected through a

TCP/IP interface to the Internet to log into social networks like Facebook, LinkedIn, Twitter, SnapChat, Instagram, etc. Through these third-party services, the machine can correctly identify the voter's contacts and political content posted to and visible in the voter's social networks by the contacts. The machine then processes the political content to determine which candidates and issues are most preferred by the voter's contacts...

For example, the processor may access a voter's Twitter page and identify political leanings of people the voter follows, by, for example, identifying contacts who follow political candidates or retweet political statements. ...Or for example, the processor may access a voter's Facebook page and identify politically-themed stories appearing in their newsfeed, as well as tally how many friends like or follow particular political causes. Using these gathered tallies of political activity from an authenticated service, the processor can determine most popular or important candidates and issues and either recommend them or vote them for the voter.

FIG. 3 of the '303 Patent is shown below, illustrating an example voting machine 100 with (*inter alia*) touch screen 110, processor 150, and memory 160, all connected to an interface 200 with social networks 210, as described in the '303 Patent:

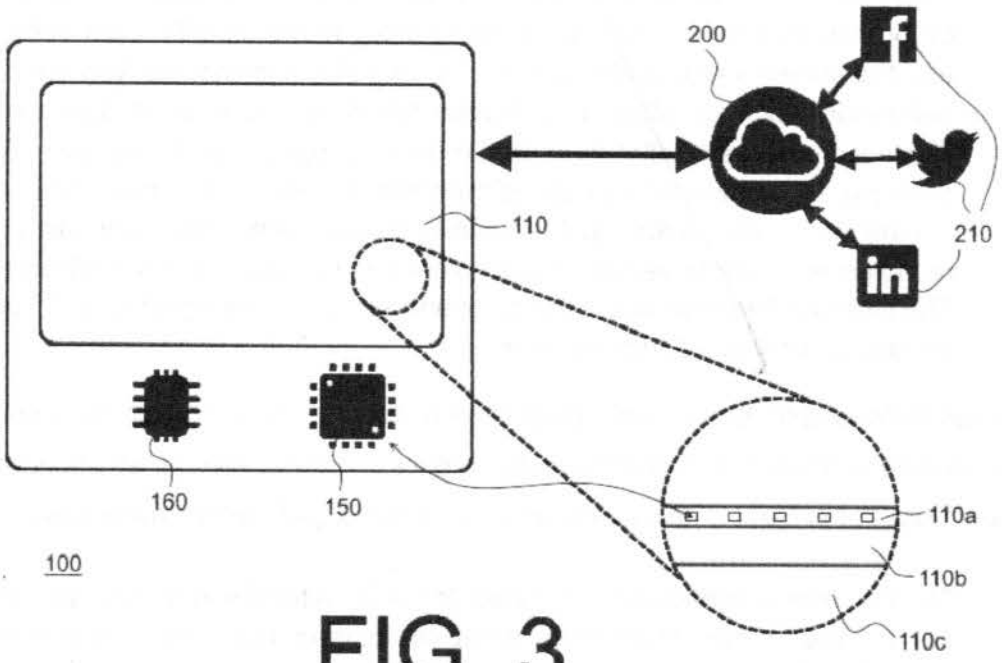

FIG. 3

Claims 1, 10, and 11 of the '303 Patent recite:

1. An electronic voting machine comprising:
a computer processor with memory;
a touch screen on or in the electronic voting machine, wherein the touch screen includes a flexible conductive electromagnetic shield protecting the touch screen against decalibration, wherein the computer processor is programmed to,
test the touch screen for decalibration,
indicate decalibration by changing an original color used in the touch screen to a different color, and
halt further use of the electronic voting machine until the touch screen is re-calibrated.

10. An electronic voting machine comprising:
a computer processor with memory;
an input device configured to receive voting selections from a voter; and
an interface communicatively connected with at least one social network of the voter, wherein the computer processor is programmed to,
access the social network of the voter,
identify political activity visible to the voter in the social network from connections of the voter in the social network,
determine voting preferences of the connections based on the political activity, and
at least one of, recommend to the voter and vote for the voter, the voting preferences of the connections.

11. The electronic voting machine of claim 10, wherein the social network is Facebook.

During the original prosecution of the '303 Patent, claims 10 and 11 were rejected as anticipated under 35 U.S.C. § 102(a)(1) (post-AIA) by a voting application called VoteTrumper, first installed on mobile devices on January 14, 2012. The VoteTrumper app included a "contact input" feature in which users could submit contact lists from their mobile device into the VoteTrumper application. The feature would then analyze those contacts from the phone for online political activity, including searching the Internet. The feature would tally particular views and candidate support statements among those found and finally display the results as a recommendation to the user as a "Vote Like Your Friends" screen in the VoteTrumper application. The Examiner applied

VoteTrumper's contact input feature for the entire "access," "identify," "determine," and "recommend" configurations of the processor, with the VoteTrumper application as installed on an Internet-capable smartphone with touchscreen meeting the remainder of the claim.

In response, Shrub argued that VoteTrumper did not meet claims 10 or 11. Particularly, Shrub filed the following remarks before the Examiner (emphasis in original):

> Claim 10 recites a processor that "access[es] the social network of the voter" and then identifies visible political activity "in the social network." VoteTrumper, however, accesses a ***contact list*** from a user's mobile device and ***then looks online*** for political activity of the contacts. The device's contacts and the Internet are <u>not</u> the same "social network" used in the accessing and identifying of claim 10. As such, VoteTrumper fails to teach or suggest the "social network" used in both the accessing and identifying elements of claim 10. . .

The Examiner withdrew the rejection based on these remarks and allowed the application. In her Reasons for Allowance, the Examiner stated:

> Claim 10 is allowable because, while the prior art discloses what is fairly understood as an electronic voting machine, the prior art is not seen to disclose such a machine using Facebook or another social network as claimed by the Applicant.

In his Comments on the Reasons for Allowance filed with the issue fee payment, Shrub made a general reply:

> Although the Examiner identifies individual terms allegedly not disclosed by the prior art, the claims are not necessarily limited to such terms. Rather, the claims' allowability must instead depend on their unique arrangement and interrelation of terms and/or the advantages and unpredicted results of such organization.

<u>Shrub's Conference Article & Presentation</u>

A month prior to filing the patent application, on March 18, 2013, Shrub gave a presentation at a technical conference sponsored by the Citizens Disunited Voting Technology Association. Ahead of the presentation, Shrub emailed to the conference