AVANTE Delivers Accessibility to Optical Voting System

PRINCETON—(BUSINESS WIRE)—January 14, 2005—AVANTE is pleased to announce the allowance of US patent (Published patent application number 10/260167) on its auto-marking mark-sense paper voting system. AVANTE started election system accuracy and transparency improvement drives in 2000 with its pioneering innovation of voter verified paper audit trail (VVPAT) for electronic voting systems. This newly allowed patent on what is commonly called "auto-marking" of traditional paper ballot builds a bridge between the traditional "mark-sense" paper balloting system and the ability to provide voice-assistance and accessibility features to voters with visual or other disabilities. This accessible paper balloting system, OPTICAL VOTE-TRAKKER™, provides an alternative to the direct recording electronic systems (DRE) for jurisdictions nationwide in meeting the Help America Vote Act of 2002 accessibility requirements by 2006.

This new technology complements the jurisdictions that use paper ballots for absentee voting. The "auto-marking" paper ballot system allows the voters to vote in the same way as the DRE touch-screen system. Instead of recording the voted electronic ballot directly in the memory, the system marks on a pre-printed ballot, or prints an optical scan ballot. The ovals of the selected candidates are completely filled in as the voter finishes his selections using touch-screen and/or audio balloting. The voters then examine the paper ballot for correctness before submitting for counting.

Similar to DRE systems, ballots cannot be over-voted. Using the "skip contest" feature incorporated in all of the VOTE-TRAKKER™ solutions, all unintentional under-votes are also resolved to achieve the first 0% residual vote of any voting system.
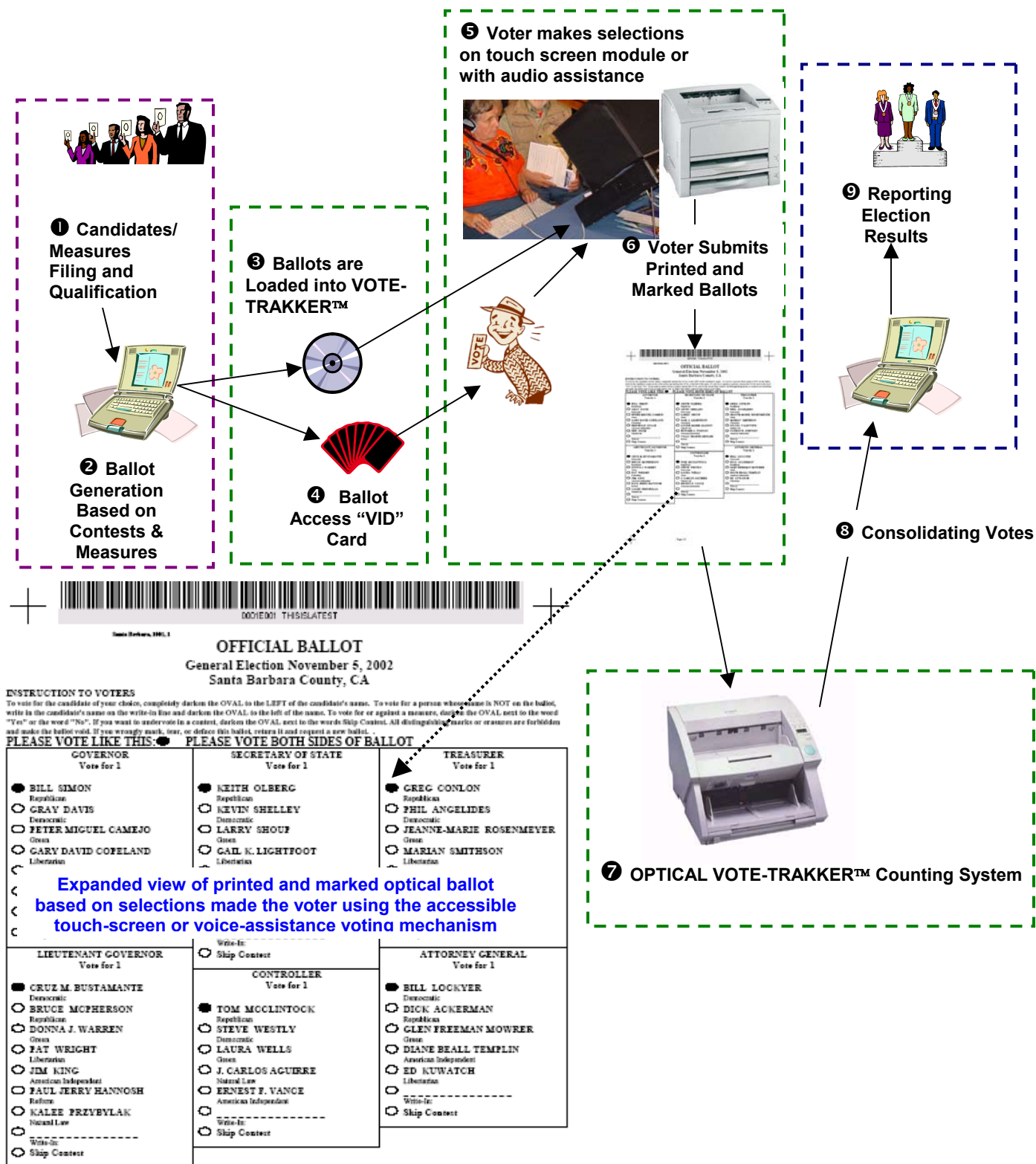
OPTICAL VOTE-TRAKKER™ also incorporates a randomly generated unique ballot identifier to authenticate every ballot. No duplicate ballots will be counted. This unique feature eliminates both unintentional human errors and intentional tampering. The randomly generated unique ballot-identifier also helps to authenticate ballots faxed in by overseas voters.

ABOUT AVANTE
AVANTE, located in Princeton, NJ, is an "up and comer" in the voting industry. AVANTE is leading the drive for voting system improvement with its pioneering use of voter verifiable paper audit trail (VVPAT) for electronic voting systems. AVANTE will license this and other patented technologies to the jurisdictions and other election solution providers in a united effort to improve the accuracy and transparency of the election processes of the nation.

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❺ Voter makes selections on touch screen module or with audio assistance

❶ Candidates/ Measures Filing and Qualification

❸ Ballots are Loaded into VOTE-TRAKKER™

❾ Reporting Election Results

❻ Voter Submits Printed and Marked Ballots

❷ Ballot Generation Based on Contests & Measures

❹ Ballot Access "VID" Card

❽ Consolidating Votes

❼ OPTICAL VOTE-TRAKKER™ Counting System

0001E001 THISISLATEST

Santa Barbara, 1001, 1

OFFICIAL BALLOT

General Election November 5, 2002
Santa Barbara County, CA

INSTRUCTION TO VOTERS
To vote for the candidate of your choice, completely darken the OVAL to the LEFT of the candidate's name. To vote for a person whose name is NOT on the ballot, write in the candidate's name on the write-in line and darken the OVAL to the left of the name. To vote for or against a measure, darken the OVAL next to the word "Yes" or the word "No". If you want to undervote in a contest, darken the OVAL next to the words Skip Contest. All distinguishing marks or erasures are forbidden and make the ballot void. If you wrongly mark, tear, or deface this ballot, return it and request a new ballot. .

PLEASE VOTE LIKE THIS:●   PLEASE VOTE BOTH SIDES OF BALLOT

GOVERNOR Vote for 1	SECRETARY OF STATE Vote for 1	TREASURER Vote for 1
● BILL SIMON Republican	● KEITH OLBERG Republican	● GREG CONLON Republican
○ GRAY DAVIS Democratic	○ KEVIN SHELLEY Democratic	○ PHIL ANGELIDES Democratic
○ PETER MIGUEL CAMEJO Green	○ LARRY SHOUP Green	○ JEANNE-MARIE ROSENMEYER Green
○ GARY DAVID COPELAND Libertarian	○ GAIL K. LIGHTFOOT Libertarian	○ MARIAN SMITHSON Libertarian

Expanded view of printed and marked optical ballot based on selections made the voter using the accessible touch-screen or voice-assistance voting mechanism

Write-In: ○ Skip Contest

LIEUTENANT GOVERNOR Vote for 1	CONTROLLER Vote for 1	ATTORNEY GENERAL Vote for 1
● CRUZ M. BUSTAMANTE Democratic	● TOM MCCLINTOCK Republican	● BILL LOCKYER Democratic
○ BRUCE MCPHERSON Republican	○ STEVE WESTLY Democratic	○ DICK ACKERMAN Republican
○ DONNA J. WARREN Green	○ LAURA WELLS Green	○ GLEN FREEMAN MOWRER Green
○ PAT WRIGHT Libertarian	○ J. CARLOS AGUIRRE Natural Law	○ DIANE BEALL TEMPLIN American Independent
○ JIM KING American Independent	○ ERNEST F. VANCE American Independent	○ ED KUWATCH Libertarian
○ PAUL JERRY HANNOSH Reform	○ _____	○ _____
○ KALEE PRZYBYLAK Natural Law	Write-In:	Write-In:
○ _____	○ Skip Contest	○ Skip Contest
Write-In:		
○ Skip Contest		

Auto-Marking Accessible OPTICAL VOTE-TRAKKER™ System Architecture & Overview
(Rev. 10-28-2004)

The following are some of the most pertinent claims of the pending patent on automatic marking or printing of paper ballots with electronic voting assistance:

56.   A method for optically reading ballot comprising:

making voting selections using any of a keyboard, a touch screen, a button, a switch, voice recognition apparatus, a Braille keyboard, a pen with writing recognition interface;

then **producing a paper ballot** by printing the voting selections on a ballot form or printing a ballot form including the voting selections;

repeating said making and said producing steps for a plurality of voters, and then:

reading or imaging each paper ballot including reading the voting selections marked thereon; and

processing the read or imaged paper ballot for determining the voting selections thereon in accordance with a template corresponding to a jurisdiction or jurisdictions to which the read or imaged paper ballot pertains,

whereby the voting selections are **marked on each paper ballot and are processed in accordance with the template corresponding to the jurisdiction** or jurisdictions.

59.   A method for reading ballots comprising:

reading or imaging each ballot by a reader located at a place accessible to a voter before the voter submits the ballot, said reading or imaging each ballot including reading or imaging a **jurisdiction identifier** thereof for selecting a **template** and reading or imaging voting selections marked on the ballot, wherein the jurisdiction identifier identifies the jurisdiction or jurisdictions to which each ballot pertains;

displaying the voting selections marked on each ballot in accordance with the selected template, but not recording or storing the voting selections; and

thereafter, submitting the ballot for counting,

whereby the voting selections marked on the ballot are **displayed in accordance with the template for review by a voter** prior to submitting the ballot for counting.

60.   A method for reading ballots comprising:

making voting selections using any of a keyboard, a touch-screen, a button, a switch, voice recognition apparatus, a Braille keyboard, a pen with writing recognition interface;

then **producing a printed ballot** by printing the voting selections on a ballot form or printing the voting selections on a ballot form and/or printing a ballot form including the voting selections;

repeating said making and said producing steps for a plurality of voters, and then:

reading or imaging each printed ballot by a reader located at a place accessible to a voter before the voter before the voter submits the ballot, said reading or imaging including determining voting selections marked on the ballot in accordance with a template corresponding to a jurisdiction or jurisdictions to which the read or imaged printed ballot pertains;

displaying the voting selections marked on each ballot in accordance with the template corresponding to the jurisdiction or jurisdictions, but not recording or storing the voting selections; and

thereafter, submitting the ballot for counting,

whereby the voting selections marked on the ballot are **read and displayed in accordance with the template for review by a voter** prior to submitting the ballot for counting.