Release Highlights for BluePrint-PCB Product Version 3.5

New Functionality in V3.5

The following functional enhancements are contained in BluePrint Version 3.5:

- ✓ New Document Wizard
- ✓ Installation Update for Large installations
- ✓ Parts List Table support for Multiple Variants
- ✓ Parts List Table support for Alternate Parts
- ✓ Drill Row Drawing Element support
- ✓ Reference Designator Placement Optimization
- ✓ More Note Sublevels
- ✓ USERNAME system variable
- ✓ Drill Symbol size Support for Drill Charts
- ✓ GD&T Sizing Support for Callout Shapes
- ✓ Note Continuation without Indices
- ✓ UNICODE Support for PDF Export, DXF Import and DXF Export
- ✓ RSS Live Web Updates

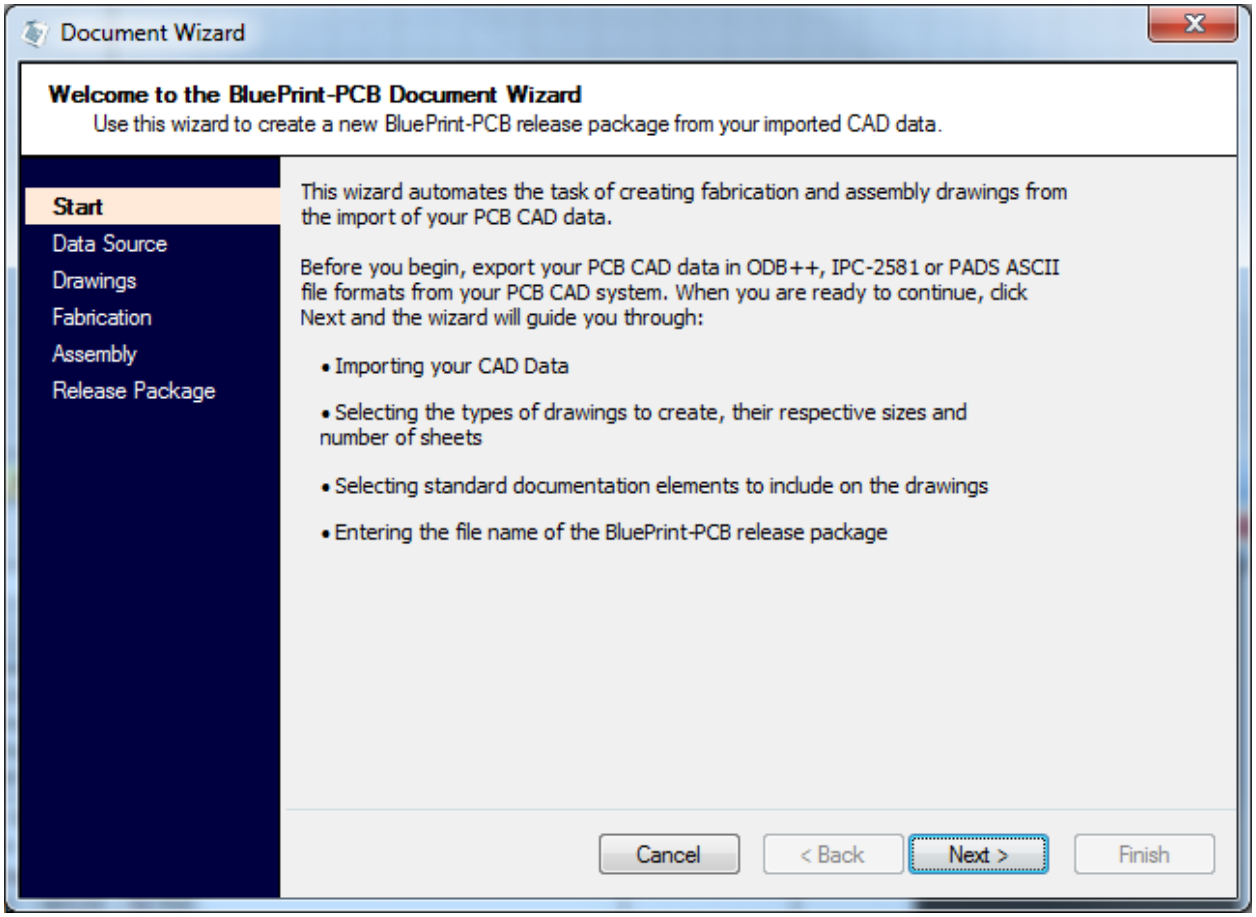
New Functionality Details

New Document Wizard

Fast Document Creation Using Page Wizard

BluePrint-PCB's Document Wizard allows the user to quickly and easily create documentation.

Use the New Document Wizard to create new documents from CAD Data import with minimal user intervention. Select the file to import, choose the types of documents to create, select document options and the documents are created for you. Document objects are pre-located on the sheet and are easily adjusted to suit your document requirements. .



Installation Update for Large installations

Installation Updated to Using Windows Installer

The installation application has been enhanced to simplify product installation and updates across an enterprise. Silent installations are supported for Administrator driven deployment of product updates. The deployment of updates can be customized for individual users or all products users across the enterprise. CAD Administrators can establish corporate standards for startup files, user profiles, tool options, menu and toolbar customizations and propagate them across the organization.

Parts List Table support for Multiple Variants

Parts List Table Display with Multiple Assembly Variants

Parts List Table display can now support display of multiple Assembly Variants in one table. New columns for Installed, Uninstalled and Substituted status are automatically added to the Parts List table. Each new column represents the installed status for reference designators in an Assembly Variant.

Multi-Variant Parts List				A	B
Ref Des	Part Number	Part Name	Description	MasterBuild	Option1
C1	TBD	CAP-CC08	RADIAL CERAMIC CAPACITOR, MIL-SPEC SIZE CC08	X	X
C2	TBD	CAP-CX02-D	RADIAL CERAMIC CAPACITOR, MIL-SPEC SIZE CC08	X	X
C3	TBD	CAP-CC08	RADIAL CERAMIC CAPACITOR, MIL-SPEC SIZE CC08	X	X
C4	TBD	1206	RADIAL CERAMIC CAPACITOR, MIL-SPEC SIZE CC08	X	X
C5	TBD	CAP-CX02-B	RADIAL CERAMIC CAPACITOR, MIL-SPEC SIZE CC08	X	X
C6	TBD	1206	RADIAL CERAMIC CAPACITOR, MIL-SPEC SIZE CC08	X	X
C7	TBD	CAP-CC08	RADIAL CERAMIC CAPACITOR, MIL-SPEC SIZE CC08	X	X
C8	TBD	1206	RADIAL CERAMIC CAPACITOR, MIL-SPEC SIZE CC08	X	X
C9	TBD	1206	RADIAL CERAMIC CAPACITOR, MIL-SPEC SIZE CC08	X	X
C10	TBD	CAP-CC08	RADIAL CERAMIC CAPACITOR, MIL-SPEC SIZE CC08	-	X
C11	TBD	CAP-CC08	RADIAL CERAMIC CAPACITOR, MIL-SPEC SIZE CC08	-	-
C12	TBD	CAP-CX02-D	RADIAL CERAMIC CAPACITOR, MIL-SPEC SIZE CC08	X	X

Parts List Table support for Alternate Parts

Parts List Import Support for Alternate Parts

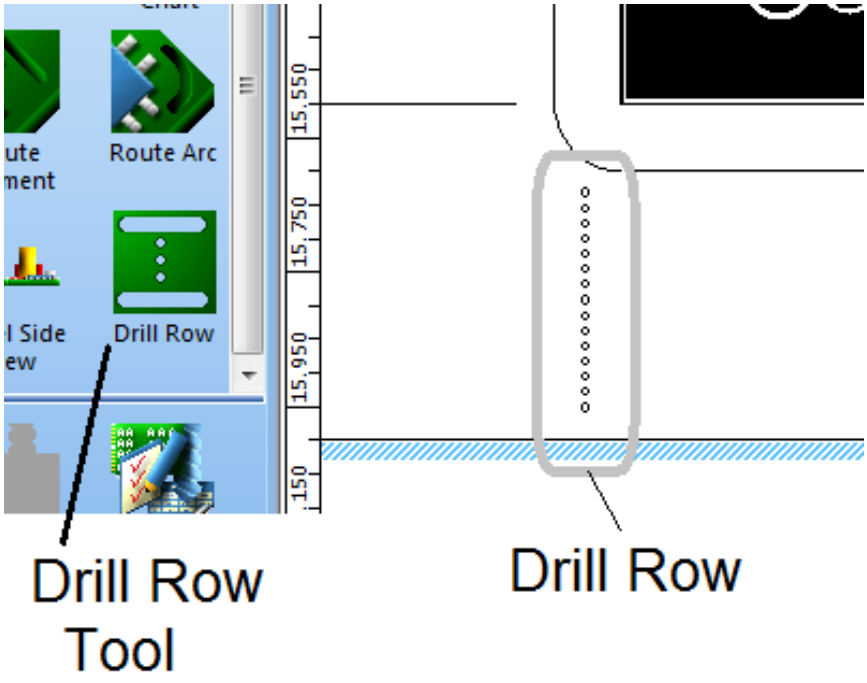
Alternate parts are approved alternative parts that can be used to replace primary part types as defined for a PCB design. Alternate parts can now be imported using Parts List CSV files. The imported alternate parts can be viewed in the Parts List Manager. The Parts List table display supports display of alternate parts.

Parts List				
Item No	**Qty**	**Ref Des**	**Part Name**	**Description**
1	1	PCB	PCB	
2	1	U7	+5VREG	+5V LINEAR REGULATOR
ALTN	1	U7	+5VREG_AAA	+5V LINEAR REGULATOR AAA
3	18	C4, C6, C8-C9, C15-C23, R1-R2, R4, R8, R11	1206	SURFACE MOUNT RESISTOR OR CAPACITOR 0.062 X 0.126 INCHES
ALTN	18	C4, C6, C8-C9, C15-C23, R1-R2, R4, R8, R11	1206_AAA	SURFACE MOUNT RESISTOR OR CAPACITOR 0.062 X 0.126 INCHES AAA
4	3	U1-U3	68154-PLCC	INTERRUPT GENERATOR
5	3	U4-U6	AM100P14	4,096-BIT (1024 X 4) ECL BIPOLAR PROM

Drill Row Drawing Element support

Panel Drill Row Breakout Drawing Element

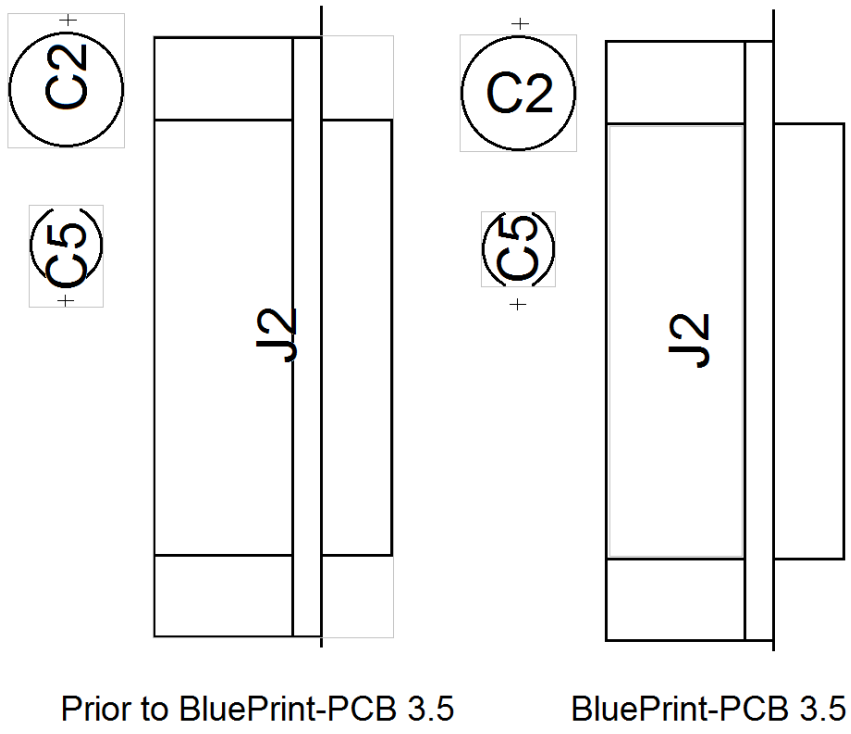
The Drill Row drawing element for Panel Drawings supports parameterized configuration and placement of a row of drills used as breakouts for panel board images. A Drill Row is a drill based perforation type consisting of an inline row of drills. Drill row length is calculated automatically based on drill size and spacing. A new Drill Row tool is added to the Panel Palette to facilitate the addition of a drill row. Drill row length and orientation is calculated automatically when inserted between panel elements.



Reference Designator Placement Optimization

Enhanced Reference Designator Placement

Reference Designator sizing and placement are important for Assembly Drawings. Automated reference designator positioning calculates the position of the label utilizing closed shapes and ignores ancillary items such as polarity markings. The label size and orientation is determined based on the size and orientation of the shape.



More Note Sublevels

Support for Five Levels of Notes

The number of Note levels for indentation is increased from three (3) to five (5) levels. Note block indentation is updated to support the definition for indices, number positions and text positions for the increased number of subnote levels.

USERNAME system variable

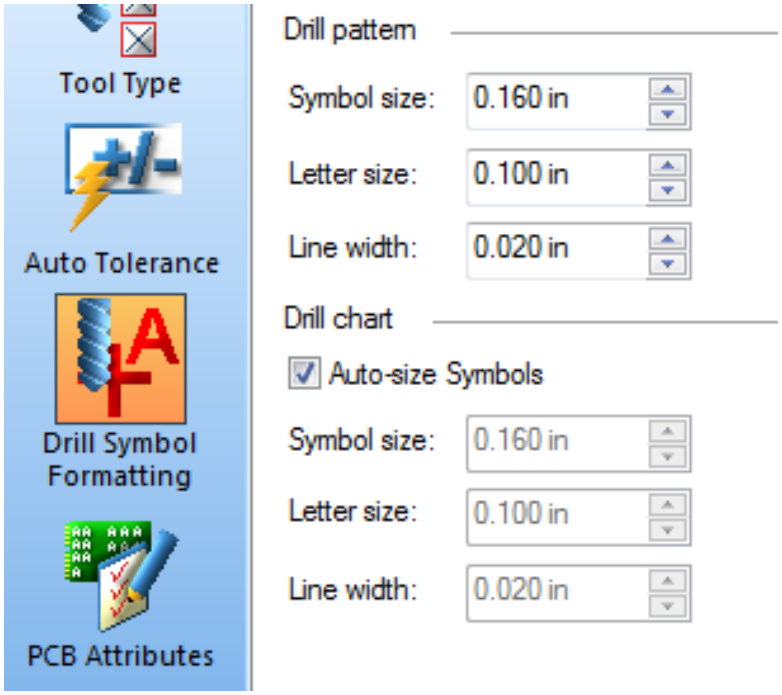
USERNAME System Variable for User Login is Supported

The USERNAME system variable displays the current user login name as defined by the Window OS. The USERNAME system variables can be inserted into any text string. When inserted into a text string, the USERNAME variable can be configured as static or to be updated automatically each time the BPD file is loaded.

Drill Symbol size Support for Drill Charts

Separate Sizing Controls for Drill Pattern Symbols and Drill Chart Symbols

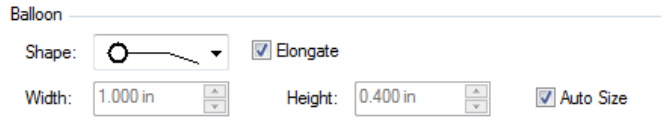
Drill Symbols are displayed in Drill Patterns and Drill Charts in Fabrication Drawings. The Fabrication Manager supports control of Drill Symbol sizing separately for both Drill Patterns and Drills Charts. The symbol size, letter size and line width for Drill Symbols can be specified. Further, Drill Chart Symbols can be automatically sized based on the height of the cell in the parent Drill Chart.

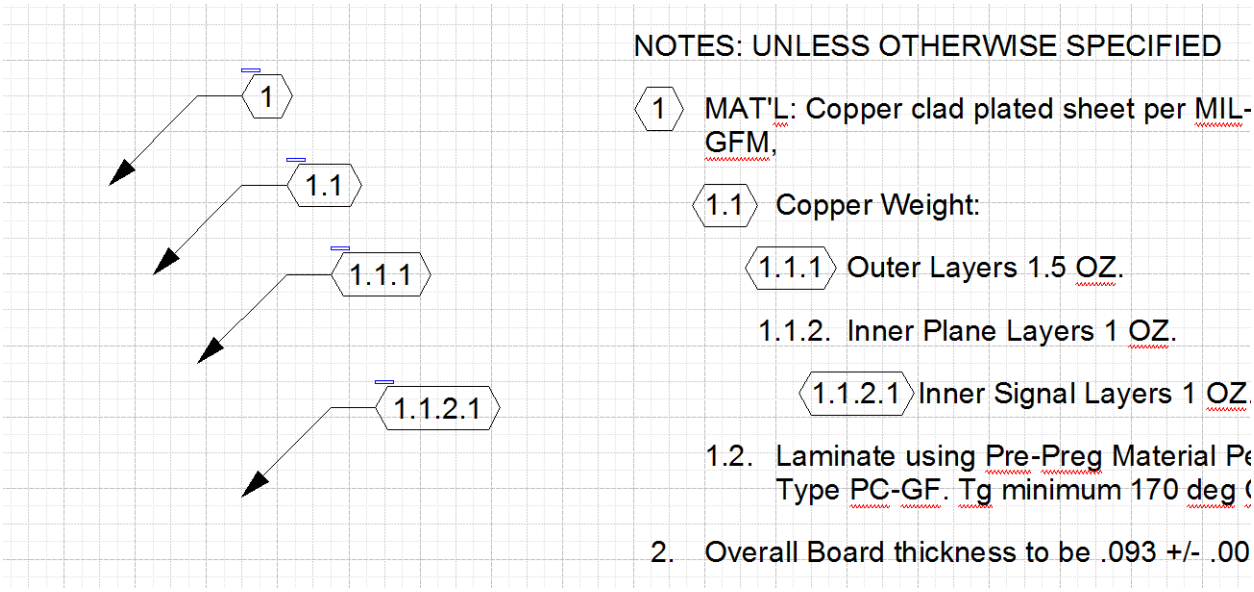


GD&T Sizing Support for Callout Shapes

Elongate Callout Balloons based on Font Size and Text Length

Callout balloon sizing is supported to enclose the entire text associated with a callout. Formatting controls for callout balloons are updated to specify a width for long hexagon shapes and oval shapes based for circle shape balloons. Automatic sizing supports GD&T sizing rules base on the ASME Y14.5M standard. Balloon shapes on Callouts can be enabled to resize or elongate automatically when embedded text size (height) or string length increases. Automatic resizing can be set independently for each Balloon type. All Balloon types can be enabled for automatic resizing. However, only rectangular, circular, square and hexagonal shapes can be enabled for elongation. Alternatively, the hexagon and circle balloon shapes can be enabled to for manual elongation.





Note Continuation without Indices

Support for Note Continuation after Subnotes

A note can be continued below its immediate sub notes. A note continuance is considered part of the source note text and not indexed

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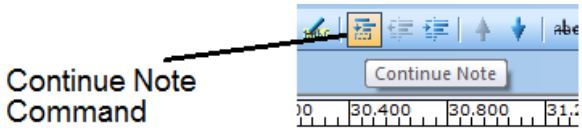

NOTES: UNLESS OTHERWISE SPECIFIED

Note ⇨ 1. MAT'L: Copper clad plated sheet per MIL-P-13949/4, Type GFM,

A. Copper Weight:
   a) Outer Layers 1.5 OZ.
   b) Inner Plane Layers 1 OZ.
   c) Inner Signal Layers 1 OZ.

B. Laminate using Pre-Preg Material Per MIL-P-13949/12, Type PC-GF. Tg minimum 170 deg C.

Continuance ⇨ MAT'L LMC Laminated Copper as required.

UNICODE Support for PDF Export, DXF Import, and DXF Export

Support for UNICODE Font and UNICODE Font Names

The PDF Export interface supports UNICODE fonts such as Japanese and Chinese language fonts. The DXF Import and DXF Export interfaces also support UNICODE fonts. The UNICODE support in the PDF and DXF interfaces also includes support for font names of fonts that also contain UNICODE characters.

RSS Live Web Updates

RSS Feed Updates for BluePrint Product and DownStream News

To facilitate keeping abreast of the latest DownStream Technologies product and corporate news, the lower portion of the start tab offers direct links to the latest product and corporate news from the DownStream website.

BluePrint-PCB V3.5 Build Defect Fixes

Project	ID	Description
Dimensioning	55307	Rounding error for negative coordinate dimensions
Dimensioning	56064	Rounding error for line entered in millimeters with .1234 precision.
Dimensioning	55881	Erroneous floating dimension highlighting for drill symbols in drill pattern PCB view.
Editing	54451	Added support for Auto-update of USERNAME system variable when BPD is loaded
Editing	55553	Document wizard – added optional continuation and revision blocks
Editing	55684	File revision transparent display is not working
Editing	55689	File revisions are not printed correctly
Editing	55766	File revision display shows incorrect pad and copper colors
Nomenclature	55372	Exploded view dimensions are highlighted as floating
Nomenclature	55257	Target point is not drawn in BluePrint Viewer
Nomenclature	55763	Reference designators are not visible for certain exploded views
Nomenclature	55764	BluePrint-PCB J - error occurs when adding two title blocks, sheet borders, revisions
Nomenclature	55767	Incorrect parenthesis for reference dimensions occur on PDF export
Nomenclature	55768	Error occurs when dimensioning Exploded views for panels
Nomenclature	55769	Error occurs on Format Parts List when editing split section
Nomenclature	55770	Error when copying and pasting Assembly PCB View
Nomenclature	55993	When placing the sheet border, the drag and drop placement works well; however, single click on the sheet border icon and placement using the dialog results in tables that shift to the right
Nomenclature	56106	Insert Reference causes error for certain drill charts

Noteblocks	54143	Note can have continuation text after subnotes
Noteblocks	55765	Link window does not show note continuation
Panel	55314	PCB shifts in panels on ECO import
Panel	55373	Cannot snap to pinning holes in exploded views
Panel	55371	File Merge - mill tabs dropped
Panel	55371	File Merge – coordinate dimensions to mill tabs dropped
Panel	55376	File Merge causes dimensions to shift on panel drawing elements
Panel	55377	Angular dimensions jumps on unmerge and remerge web routes
Panel	55378	Coordinate dimensions jumps on Format Panel close button
Panel	55380	Radius dimension moves after file save and reopen
Panel	55394	Automation API missing for getting drill x and y location in PCB View for Panel Drawing
Panel	55938	Add Web Route command results in web route that does not hug the board outline in tight recesses
Panel	55939	Dimensions jump from their original locations on Unmerge Web Routes command and on File Open command
Panel	55941	Dimensions are jumping from the middle perforation drill to the first perforation drill after File Save and File Open
Panel	56168	Merge web route results in missing graphics and extra graphics for board outlines with small notches
Panel	56234	For a Panel Drawing, Mill Tabs are lost or shift position for certain files upon File Open operation.
Panel	56235	For a Panel Drawing, the Add Web Route command does not properly hug the board outline for certain files with arcs in the board outline shape.
Import	55282	PADS ASCII Import Assembly Variant buffer overflow
Import	55762	Support for Zuken IPC-2581 floating point numbers with commas
Import	55967	The Expedition ODB++ Import API interface is updated with a new option to ignore graphics on assembly drawing layers that are

		associated with component text
Import	56063	The Allegro ODB++ and Expedition ODB++ Import API interfaces do not import drill tolerances correctly for certain ODB++ files.
Import	56185	The Allegro ODB++ and Expedition ODB++ Import API interfaces do not map tolerances to drill tools correctly for certain files.
Import	56250	PADS ASCII import for certain files creates improper inverted thermal pad images for positive copper pours.
Export	55688	PDF and DXF export support for file revision display.
Export	56187	PDF export display component pin pad hatching incorrectly.
Export	56248	PDF export for certain files does not fill some copper pour polygon flood areas.
Export	56249	PDF export for certain files does not properly clip PCB view content to Exploded View and Magnified View pictorial boundary.
Export	54256	BluePrint to CAM350: Solid fiducials become donuts when CAM350 is invoked from a BluePrint session.
Scripting	56219	Automation method SetActiveSheet() does not find the next sheet in certain drawings
User Interface	55996	Disable Live Web RSS feed during installation

Patent, Copyrights, and Trademarks

Patent

"AUTOMATED PCB MANUFACTURING DOCUMENTATION RELEASE PACKAGE SYSTEM AND METHOD", United States Patent No. 7,409,666 B2

At least one other patent pending.

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