

Monsanto Company
Organic Chemicals Division

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provisions of the
Patent Act

PRELIMINARY DISCLOSURE OF INVENTION

NOTE: 4-24 3839

Complete this form as soon as one successful experiment illustrative of the invention has been performed. Then process one copy through your group leader and research manager for review, rating, and submission to the Patent Department. Copies will be distributed after disclosure number assignment and patent attorney allocation. Include C.P. numbers for all new chemicals.

1. Statement of Invention: COLORLESS INKS FOR TRANSFER PAPER

Certain salicylates and esters of aromatic 2-hydroxycarboxylic acids are exceptionally good solvents for colorless inks, such as those containing crystal violet lactone (CVL). Solutions containing CVL at 5% (or saturation in some cases) were prepared from the following solvents and used to mark on or stain an acid resin coated paper. Intensity of blue color formation is given at various times; the higher the number the darker the color.

	<u>15 sec.</u>	<u>1 min.</u>	<u>1 hr.</u>	<u>Overnight</u>
Benzyl salicylate	30	38	43	45
Methyl salicylate	38	39	58	66
n-Butyl salicylate	47	49	-	-
Amyl salicylate	47	53	56	70
"Loralkyl" salicylate	45	49	-	-

By Contrast

Benzyl n-butyrate*	15	16	~17	65
Dimethyl phthalate*	0	0	~0	37

2. Sources searched and prior art found: Chem Abstr 1907-1966 under "National Cash Register" and under "Crystal violet lactone" and "3,3-bis-(4-dimethylaminophenyl)-6-dimethylaminophthalid." The following solvents are mentioned in this type ink: chlorinated biphenyls, alkylated biphenyls, hydrogenated terphenyls, DOP, chlorinated paraffins, petroleum distillate. Certain volatile solvents (e.g. toluene) are mentioned in a related invention.
3. Notebook page where example is to be found:

OR-71987-72000 OR-150701-150705 OR-150760-150764
 OR-150711-150757 OR-150769-150778

4. Inventor(s): Kern Search5. Group Leader: J.W. Guichette

DSW 587479

6. Suggested Rating: A-R J.W. Guichette
Group Leader7. Final Rating: A-R T. R. L. 11/14
Manager of Research

* Must "evaporate" for color to form

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