Monsanto INDUSTRIAL CHEMICALS CO.

FROM (NAME & LOCATION) E. S. Tucker - T2F

DATE : March 8, 1974

SUBJECT : MICROBIAL DEGRADATION OF PCB's
U. S. PATENT

REFERENCE : WBP/EST Memo 3-4-74

TO : W. B. Papageorge
B1ND

cc: H. S. Bergen - B2SL
W. H. Duffey - E1SA
J. T. Garrett - A2SA
R. E. Keller - T1B
W. R. Richard - T3A
E. P. Wheeler - A2SA

MAR 11 1974

I do not believe this patent to be valid. The fluid he used in his supporting experiments (column 5, lines 19 & 53) was Pydraul 312A and not Pydraul 312. Pydraul 312A was not a PCB-containing fluid. Its formulation consisted of:

35.0% Aroclor 5432 (chlorinated terphenyl)
21.0% Gulf 1200 Texas Oil
15.0% S-711
28.6% S-140

The maximum level of PCB's that Pydraul 312A could have contained was ~1%. He spiked his culture media with 0.2%, by weight, and this solution, therefore, could have contained a maximum of 0.7 ppm PCB's. He also separated the resulting cell mass before analyzing the water. Any, if not all, of the PCB's were probably absorbed on the cell mass which he discarded. He further quotes a detection limit of 0.3 ppm, well above the solubility limit of most PCB mixtures and so, even if the water did contain some minor level of PCB's, he would not have detected them.

I am not sure if it would be to our advantage or disadvantage to notify the "inventor".

Scott

E. S. Tucker

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