

Patent Citation Analysis: *A New Tool for Identifying Possible Licensees or Infringers*

Dr. Aymen A. Kayal

KFUPM

4th International Conference on Chemistry in Industry

(Bahrain)

30/10/2000

Patent Citation Analyses

Hahn, et. al. Oct. 17, 2000

***Catalyst* for removing olefins from aromatic compounds or mixtures thereof**

Abstract

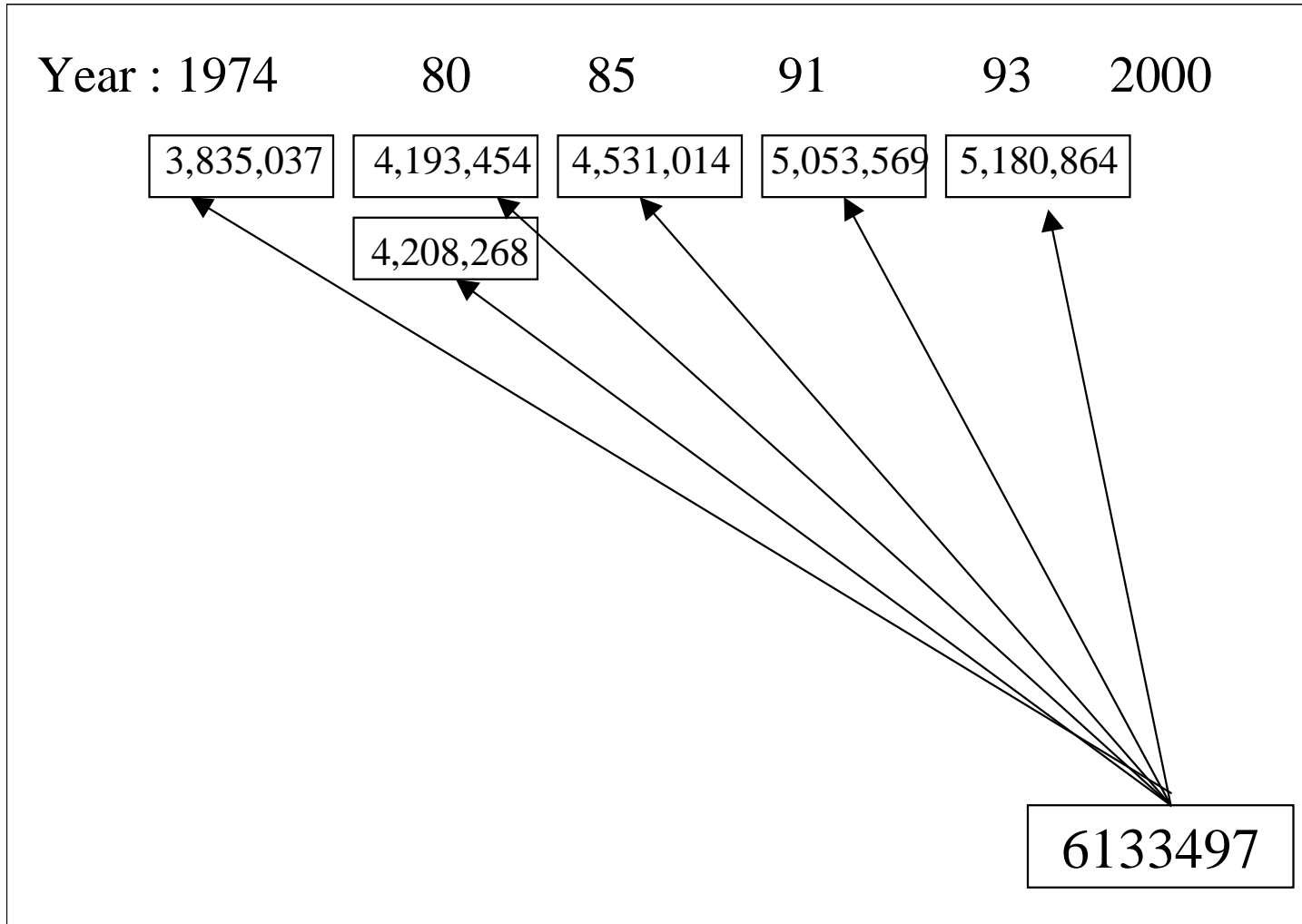
A *catalyst* is described on the basis of acid-activated smectitic clay minerals for removing olefins from aromatic compounds or mixtures of aromatic compounds which is characterized in that the acid-activated clay mineral contains at least 5 milli-equivalents/100 g of exchangeable Al(³⁺) cations.

Inventors: **Hahn; Reinhard** (Vilsheim, DE); **Engelhardt; Thomas** (Freising, DE); **Flessner; Uwe** (Munich, DE); **Zschau; Werner** (Steinebach, DE).

Assignee: **Sud-Chemie A.G.** (DE).

References Cited

- U.S. Patent Documents
- 3,835,037 Sept., 1974 Fairweather et al. **208/260**
- 4,193,454 Mar., 1980 Goldstein **166/302**
- 4,208,268 Jun., 1980 Sato et al. **208/46**
- 4,531,014 Jul., 1985 Gregory et al. **585/415**
- 4,795,550 Jan., 1989 Sachtler et al. **208/307**
- 5,053,569 Oct., 1991 Marquis et al. **585/255**
- 5,180,864 Jan., 1993 Sanderson et al. **585/10**
- 5,749,955 May, 1998 Shaked et al. **106/287.17**



Citation Links for Patent 6133497

Patent Citation Maps

Patent Citation Map Example

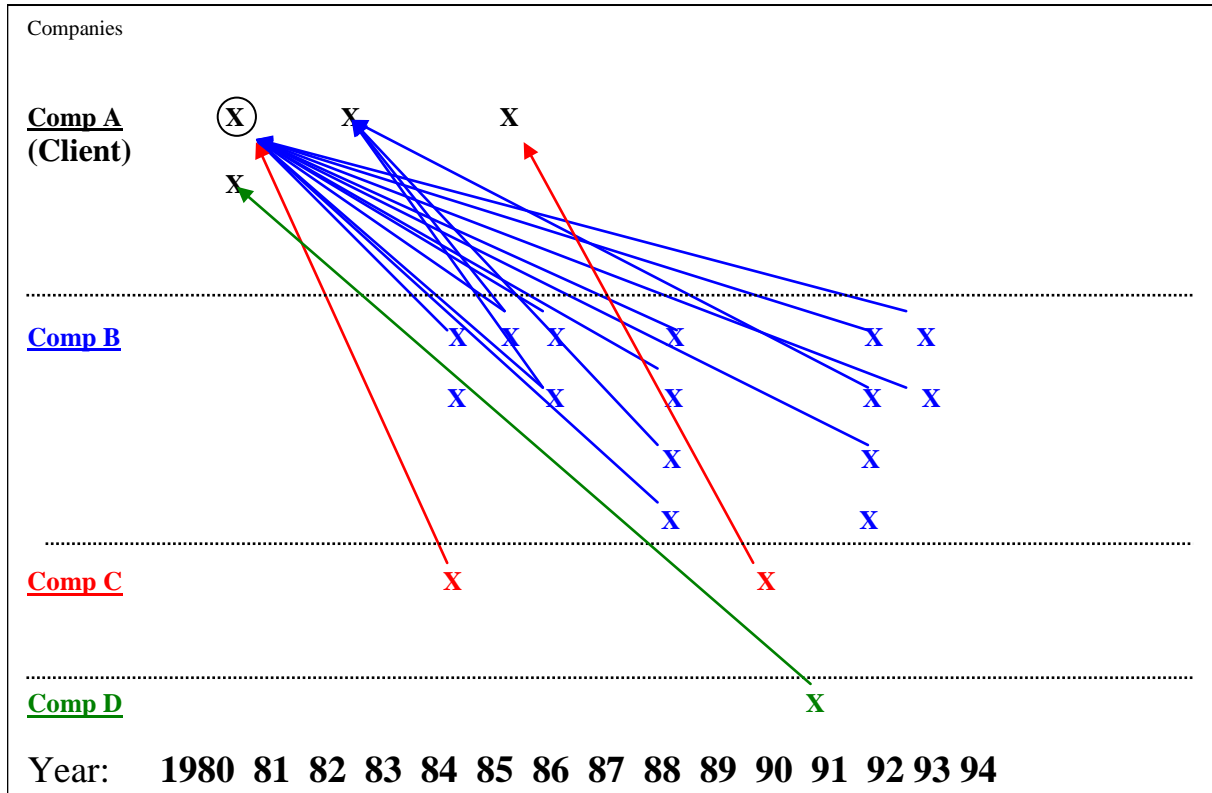


Figure-1. Citation Map Illustration of Across Company Citations (each X represents a patent)

Case Study

1. Identifying high-impact patents of company X.

Table-1. The most cited patents of company X.

<u>Patent</u>	<u>Citations received from other companies' patents</u>
1	12
2	9
3	7
4	22
5	9
6	7

2. Identifying organizations heavily citing company X patents

<u>Assignee</u>	<u>Number of citations to company X patents</u>
1. Optical Imaging Systems Inc. (OIS)	13
2. Fuji Photo Film Co. Ltd.	12
3. North Dakota State Univ.	11
4. Canon Inc.	8
5. Sumitomo Chemicals Co.	8

Conclusions and Recommendations

- After a map reveals a strong linkage between a company's own patents and another company's patents, the concerned company should:
 - investigate the complementary nature of these patents.
 - continuously monitor for events such as: a transfer of assignee, expiration of protection period, or movement of the inventor to another organization etc.
 - The company with a greater need for merging the complementary technologies could always transfer the technology via a license agreement, an acquisition of the patent, or a corporate joint venture.

Conclusions and Recommendations (cont.)

- In case none of the above happens, the product lines of suspected companies should be continuously checked for possible infringement.
- Highly cited patents are usually strong patents, which should be maintained throughout its full protection period.