

# Method to Produce Safer Cigarette Was Found in 60's, but Company Shelved Idea

By PHILIP J. HILTS  
Special to The New York Times

WASHINGTON, May 12 — Tobacco companies not only knew of the hazards of smoking by the early 1960's but had already discovered and patented a critical step for making a safer cigarette.

The idea was to heat the tobacco rather than burn it, thus avoiding the process that creates most of the hazardous substances in tobacco smoke. The Brown & Williamson Tobacco Corporation, a subsidiary of the London-based British-American Tobacco PLC, put the idea to the test in a cigarette, code-named Ariel, according to internal company documents obtained by The New York Times. The prototype was granted a patent in 1966 but was never marketed.

The company decided against pressing the safer products toward the market for fear that they would make their other products look bad, according to company documents and interviews with scientists working on the projects. Another likely reason, the documents suggested, was that smokers might find the cigarettes less satisfying and therefore would not buy them.

Thomas Fitzgerald, a spokesman for Brown & Williamson, said: "From the description given to us, it appears you are basing your article on attorney-client privileged documents that were stolen by a former employee of a law firm that worked for Brown & Williamson. Anybody who knowingly uses stolen information is in fact contributing to an illegal act. We have no further comment."

Another early safe cigarette invention was made by Dr. Thomas Mold, assistant director of research for Liggett & Myers, and his colleagues. Dr. Mold said in a telephone interview this week that his group had created a safer cigarette in research that began in 1955, and that the product was ready for market by 1979.

Dr. Mold, now retired, said he was told one day in 1979 that there had been a vote of executives in the company, on the advice of lawyers, that the company should not produce a safer cigarette.

"We wrote up the work we had done in a paper for publication, but we were not allowed to publish it," he said. "It describes what we did, how we did it and what the results were."

At Philip Morris, one project mentioned in memorandums and reports starting from the early 1960's was "Project 0100," an effort to make a "medically acceptable" cigarette. The papers were disclosed in lawsuit brought a decade ago by Rose Cipollone, who died from lung cancer before her case was completed. She later became the first person to be awarded damages in a smoking liability case in this country.

According to the Brown & Williamson documents, the Ariel cigarette would have cut down greatly on the cancer-causing substances in cigarette smoke and cut down the amount of secondhand smoke coming from the cigarette. It would have also reduced its potential fire hazard, as later versions of similar products proved.

## House Subcommittee Backs Cigarette Ban

By DAVID E. ROSENBAUM  
Special to The New York Times

WASHINGTON, May 12 — A subcommittee in the House of Representatives approved legislation today that would ban smoking in most parts of most buildings open to the public.

This is the most extensive anti-smoking legislation ever to clear a Congressional panel, but it is unlikely to go further in Congress this year. It was adopted by the Energy and Commerce Committee's Subcommittee on Health and the Environment.

Under the measure, smoking in buildings that 10 or more people enter regularly would be permitted only in rooms with their own separate exhaust systems. The only exceptions would be private homes, private clubs, tobacco shops, bars, restaurants and prisons.

Representative Henry A. Waxman, the California Democrat who heads the panel, called the legislation "a vitally important public health measure" and said, "There is no other legislation before Congress that could do so much good at so little cost."

Mr. Waxman, who has cam-

paigned against smoking for years, said his panel was an especially hard nut to crack because the tobacco industry had succeeded in arranging for many of its supporters to become members.

The bill would probably be passed if it got to the floor of the House, but first it must clear the full Energy and Commerce Committee.

That committee has a backlog of major legislation, including President Clinton's health care proposal, renewal of the Superfund program to clean up toxic waste, an overhaul of telecommunications policy and revision of product liability statutes.

The committee's leading opponent of the smoking ban, Representative Thomas J. Bliley Jr., a Republican from Virginia, said he did not expect the bill to be taken up this year. Other senior members of the committee agreed with that assessment.

Mr. Waxman acknowledged that he had no commitment from the committee's chairman, John D. Dingell, Democrat of Michigan, that the measure would be considered this year. A vote in the sub-

committee on the legislation was delayed twice this spring because Mr. Waxman did not have the votes for approval. It was approved today, 14 to 11, after Mr. Waxman agreed to the exemption for restaurants.

Mr. Waxman said later that he still did not think all restaurants should be exempt and that he hoped to modify the bill at some point so that some restaurants would be included.

### Separate Smoking Rooms

The legislation would permit the owners of buildings open to the public to provide separate smoking rooms with their own exhaust fans. But staff assistants who worked on the bill said they expected that if it became law, most building owners would simply prohibit smoking altogether.

At a Congressional hearing on Wednesday, a similar bill sponsored by Senator Frank R. Lautenberg, Democrat of New Jersey, won support from Surgeon General Joycelyn Elders and from Carol M. Browner, the Administrator of the Environmental Protection Agency.

The Lautenberg bill stands little chance of winning committee approval this year.

The decision at tobacco companies not to proceed with less hazardous cigarettes was complex and much debated internally, experts familiar with the industry say. Some of the reasons include the fear of litigation and the implication that the companies' other products were hazardous.

In addition, the companies feared marketing problems, that is, the cigarettes would not smell or taste like what smokers were used to, and smokers might not be willing to buy a safer but less satisfying product. These fears later turned out to be justified when R. J. Reynolds introduced its version of the safer cigarette, Premier, which lasted only a short time on the market.

Ariel was developed in the 1960's, and after the early success of the prototype, the company applied in 1964 for a patent, which was granted in 1966.

The company initially had high hopes for the new cigarette, but in 1964, company executives in various memorandums expressed a fear of disclosing too much harmful information about smoking and of subsequent lawsuits. The research already completed on both the hazards of cigarettes and solutions was shelved, and the laboratories of the parent company in England, where much of the research on cigarettes was done, were closed down.

Addison Yeaman, general counsel for Brown & Williamson in the 1960's and later chief of the Council on Tobacco Research, advised company officials to be more open about what they knew about the hazards of cigarettes, company documents show, and encouraged them to try to solve the problem of hazards with a less hazardous cigarette rather than with public relations alone.

In a "strictly confidential" report to tobacco executives, Dr. R. B. Griffith, the chief of research for Brown &

Williamson, discussed research being done at the Tobacco Research Council laboratory in Harrogate, which showed the hazards of cigarettes as well as ways to make less hazardous cigarettes.

Mr. Griffith warned the executives that the sponsoring tobacco companies "may be losing control of the operation of this facility."

"Most people with whom I talked expressed deep concern over the possible impact of the reports to come from Harrogate," he said. "Their approach seems to be to find ways of obtaining maximum nicotine for minimum tar." He said the work could prompt government regulation in England and have "significant impact on the American tobacco industry."

Soon afterward, research on the hazards of cigarettes and the alternatives was halted at the Harrogate laboratory, memorandums show.

By Dec. 5, 1968, Dr. R. A. Sanford, a research director of Brown & Williamson wrote to the research directors of the parent company, B.A.T. in London, that there were safer-appearing products that could be made, and products that were actually safer: "There are two types of health products possible and they should be distinguished: (a) Health image (health reassurance cigarette) such as a low tar-low nicotine cigarette which the public accepts as a healthier cigarette, and (b) Health-oriented cigarette, which has minimal biological activity; for example, one which would yield a near-zero reading in a mouse skin-painting test."

The company did eventually market low tar and nicotine brands, among them Merit but none of them were as safe as the Ariel cigarette. That project was never revived.

Dr. Gio Gori, a scientist who has worked for tobacco companies and for the Federal Government in a

search for less hazardous cigarettes over the past three decades, said in an interview that less hazardous cigarettes could have been created and put on the market by now.

But he said the blame lay not just with the tobacco companies. If companies had not been constrained by worries over litigation, he said: "They may have solved the problems of a less hazardous cigarette some years ago. Because of the hostility and litigation, making a less hazardous cigarette would imply that the company's other products were hazardous."

"And it is my contention that that if the situation was less hostile between antismoking people and the tobacco industry, we probably would have some much improved cigarettes on the market now," he said. Referring to a program to make a less hazardous cigarette at the National Cancer Institute, which was halted in the late 1970's, he said if it "had been allowed to continue, in 5 to 10 years, we would have solved the problems" of designing a much less hazardous cigarette.

Dr. Dietrich Hoffmann, associate director of the American Health Foundation in New York, a research institute that studies tobacco and health issues, has followed the activities of both industry and the Government since 1958. He also said that others had to share the blame. "Finally, you can blame the producers of the cigarettes for not making a less hazardous cigarette when they might have," he said, "but somewhere along the way our government has slept as well."

The most complete version of a less hazardous cigarette was the Premier brand briefly marketed by R. J. Reynolds Tobacco Company in 1988. It used the Ariel idea of heating but not burning cigarettes. Premier was soon withdrawn, and company offi-

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"The big argument against letting the companies market them without regulation," he said, "is that over the past 40 years the companies have already been pretending to sell safe cigarettes — first with filters, then the low-tar and nicotine brands, and neither of them is a significant improvement in the safety of cigarettes."

**A Catch-22**

Scott Ballin, a spokesman for the Coalition on Smoking or Health, an American Cancer Society, the American Lung Association, said that because companies were not willing to be open about their research and submit their products to Government review, they ran into a Catch-22. Groups that might otherwise support a product that could cut down on cancer and heart disease were unwilling to support the industry's attempt at less hazardous cigarettes without Government oversight.

"There has to be some Government review to prove that these things are what they claim to be," Mr. Ballin said. "Are they really safe? If there is no oversight, then these products just become marketing opportunities for the companies, just as the so-called low tar and nicotine products were."

David Iauco, senior vice president for marketing at R. J. Reynolds, said that his company had actually reached the market with a cigarette that carried less risk in the Premier. But he said the company was "constrained in the claims we could make about the product," because claims of greater safety would bring F.D.A. regulation, which in turn may have prevented the product from being marketed at all.

Chals have said that it was put on the market prematurely, when it had an unusual odor and taste that some smokers objected to.

Over the years, anti-smoking groups have fought against the marketing of Premier and other less hazardous cigarettes on the ground that the addiction and some substantial health hazards would continue, even if substantial reductions of disease and death might be gained.

By 1978, several companies had done substantial research in less hazardous cigarettes, but the work had been shelved for fear of the effect it would be to invite lawsuits. The companies wanted to wait until they were forced by the Government to market less hazardous cigarettes, as a Philip Morris executive noted in a 1978 memorandum, which was made public during the Cipollone trial.

Dr. Helmut Wakenan, scientific director of Philip Morris at the time, wrote of the "intensifying pressure to develop a 'safe' cigarette."

"We are working to be in a position to design a cigarette which will meet 'less hazardous' specifications if they are ever imposed on us and at the same time make a product which is attractive to the smoker," he went on. "I am pleased to report that we already have a number of such prototypes on our shelves with more to come in the future."

He said the safer cigarettes were "insurance against surprises that may undermine the pre-eminence of our business."

Dr. Richard A. Daynard, a professor of law at Northeastern University and the chairman of the Tobacco Products Liability Project, an advocacy group that encourages liability suits against tobacco companies, said that less hazardous cigarettes should be marketed, but only under Govern-