L. C. Laporte, Esq. 21st April, 1960.

British P. No. 26,346 - K. Wimmer - mention made of "volatile solvents or ethers", etc.

British P. 392,326 - Austrian Tobacco Regie - mention made of "organic solvents", etc.

There may be valid patents other than the above which your patent agents would unearth in a search if you decided to go ahead with your own application.

As we see the position, and in view of the existing patents, of which the above are examples, you will not be able to obtain a patent simply covering the process for the extraction of tobacco with n-hexane, but might get one to cover the extraction of tobacco subsequently used - and giving e.g. greater firmness of fill, possibly improved filtration efficiency etc. - in your all-tobacco tips. Frankly, we think your chances may be no better than fifty-fifty but that, subject of course to the approval of all concerned at your end, you should at least try.

Reverting to your letter, Mr. Anderson has written a marginal note indicating agreement with the observation under (A) on page 1 to the effect that n-hexane probably extracts plasticizers in the tobacco with a reduction in its pliability. He notes against the sentence in the final para. on page 1 (These tests consistently showed the extracted tobacco to average 0.7% higher in moisture content") - "I had always thought of extracted tobaccos as drier?".

It may be that Mr. Anderson will, after his return next week, write direct about one or more of the points mentioned in your letter, so perhaps you would please regard this present acknowledgement as provisional.

With kindest regards,

Yours sincerely,

R. A. Boothroyd

AIR MAIL

CABLE ADDRESS: "ATHLETE" TELEPHONE: WELLINGTON 2-6161

IMPERIAL TOBACCO COMPANY OF CANADA, LIMITED

3810 ST. ANTOINE STREET

MONTREAL 30

P.Q.

February 2, 1960.

H. D. Anderson, Esq.,
Research & Development Establishment,
Regent's Park Road,
Southampton, England.

Dear Hugh:

We were indeed most interested to receive your letter of January 19 and the accompanying report on the visit to Fabriques de Tabacs Reunies, Serrieres (Neuchatel). As Dr. Felton has pointed out, they have completely scrapped their ideas outlined in their original patent claim. I would think that the practicality of even their new process is very much in doubt both from the standpoint of efficiency of extraction and cost. It would, indeed, be interesting to know whether Matthey's work was conducted on tar from machine extracted or laboratory extracted tobacco.

As I think you know, we have recently started using an isotopic dilution technique for determining benzpyrene. As a result of this technique, we feel we can place considerably greater reliance than formerly on the data which we obtain. The following table contains data obtained with the isotopic dilution method and these data indicate that extraction of tobacco with hexane does not cause any greater reduction of benzpyrene than it does of the total particulate matter.

	Cigarettes prepared from:	
	n-hexane extracted tobacco	Unextracted tobacco
BP: µgm/100 cigts.	2.30	2.62
mg. tar/cigt.	24.2	28.4
BP ppm of tar	0.95	0.95

The amount of extract removed in this case was 4.2% based on the dry weight of tobacco. It will be noted that the reduction in tar in this experiment is only 14.8%. The average reduction for these cigarettes determined by constant smoking over a two-year period for biological testing, was 20% but there were occasional variations to as low as 15% and as high as 25% which we can only attribute to non-uniformity either of the extraction and/or in the cigarettes themselves. Determinations of the benzpyrene contents of these tars were carried out but these analyses

...2