		06-13-2001
PATENTS ONLY	Commissioner of Pa Washington, D.C. 20 Box Assignment Please record the atta	E FACALAL LINESE KALAR LINESE KALAR KAL
1. Name of party or parties interest: David E. Lowery Michael J. Kennedy	conveying an	 2. Name and address of party or parties receiving an interest: Name: PHARMACIA & UPJOHN COMPANY, a Delaware Corporation Address: Global Intellectual Property Building 209 301 Henrietta Street City: Kalamazoo - 7 State: Michigan Zip: 49001
 Description of the interes <u>X</u> Assignment <u>Merger</u> <u>Change of Name</u> <u>Security Agreem</u> Execution Dates: May 18, 2 	ient	Other:
4. Application number(s) o Additional sheet attached? YESNO_X	r patent number(s).	If the document is being filed together with a new application, the execution date of the application is: B. Patent no.(s):
5. Name and address of par correspondence concerning should be mailed: Name: Li-Hsie Reg. No. 33,54 MARSHALL, O'TOOLE, C MURRAY & BORUN Street Address: 6300 Sears 233 S. Wac City: Chicago State: Illinois Zip: 60606-6402	this cover sheet en Rin-Laures, M.D. 47 BERSTEIN, Tower eker Drive	 6. Number of applications and/or patents identified on this cover sheet: 1 7. Amount of fee enclosed or authorized to be charged: \$40.00 8. Any additional required fee may be charged, or any overpayment credited to our deposit account: 13-2855

9. To the best of my knowledge and belief, the information contained on this cover sheet is true and correct and any copy submitted is a true copy of the original document.

'n fame Date: Li-Hsien Rin-Laures, M.D. Reg. No. 33,547

Total number of pages including cover sheet, attachments, and document: ______

PATENT REEL: 011877 FRAME: 0210

ASSIGNMENT

Title: SALMONELLA VACCINE MATERIALS AND METHODS

Inventors: David E. Lowery and Michael J. Kennedy

Serial No.:	09/809,524	Filing Date:	March 15, 2001
Docket No.:	28341/6114.N	Country: US	SA

Execution Date of Application:

As a below-named inventor, I hereby declare that:

My post office address is as stated below under my signature and I am named as inventor of the inventions or discoveries (herein INVENTIONS) as described in the patent application (herein APPLICATION) identified above. In view of valuable consideration, receipt thereof being hereby acknowledged, I do hereby assign and transfer unto PHARMACIA & UPJOHN COMPANY, a corporation of the State of Delaware having a place of business at Kalamazoo, Michigan, its successors and assigns, my entire interest in, and the full and exclusive right to, the INVENTIONS, the APPLICATION and all related applications (including all divisions, reissues, continuations, and extensions thereof) and all counterparts in other countries, and any and all Letters Patent (and certificates of invention or similar certificates) (herein PATENTS) which may be granted based upon the INVENTIONS or the APPLICATION or related applications or counterparts in other countries; said transfer and assignment being applicable throughout the world. I hereby authorize and request officials of patent offices in any and all countries of the world to issue any and all of the PATENTS, when granted, to PHARMACIA & UPJOHN COMPANY, its successors and assigns, as the assignee of my entire right, title, and interest in and to the same. I agree that I will communicate to PHARMACIA & UPJOHN COMPANY, or its representatives, any facts known to me respecting the invention; testify in any legal proceedings; sign all lawful papers; execute all divisional, continuation, substitution, renewal, and reissue applications; execute all necessary assignment papers to cause any and all of the PATENTS to be issued to PHARMACIA &

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PATENT REEL: 011877 FRAME: 0211

UPJOHN COMPANY; make all rightful oaths; and generally do everything possible to aid PHARMACIA & UPJOHN COMPANY, its successors and assigns, to obtain and enforce proper protection for the INVENTION in any and all countries throughout the world.

FULL NAME OF FIRST/SOLE INVENTOR: David E. Lowery				
Signature of Inv	ventor: Dom C. Jam			
Address:	207 Woodland Drive, Portage, Mic	chigan 49024 United States of America		
STATE OF MICHIGAN COUNTY OF KALAMAZOO				
On $\underline{May 18, 2001}$, the above-named inventor personally appeared before me and executed the foregoing instrument and acknowledged the same to be his/her free act and deed in and for the purposes set forth in said instrument.				
SEAL		Notary Public		

DEBRA J. MARQUETTE Notary Public, Kalamazoo County, MI My Commission Expires 9/25/2004

FULL NAME OF SECOND/JOINT INVENTOR: Michael J. Kennedy				
Signature of In	ventor: Miclia Glankly			
Address:	2364 Quincy Avenue, Portage, Michigan 49024 United States of America			
STATE OF M COUNTY OF	ICHIGAN KALAMAZOO			
On <u>May</u> me and execut act and deed in	$\frac{2}{2}$, the above-named inventor personally appeared before ed the foregoing instrument and acknowledged the same to be his/her free and for the purposes set forth in said instrument.			
SEAL	Notary Public			

DEBRA J. MARQUETTE Notary Public, Kalamazoo County, Mi My Commission Expires 9/25/2004