# Exhibit 1008

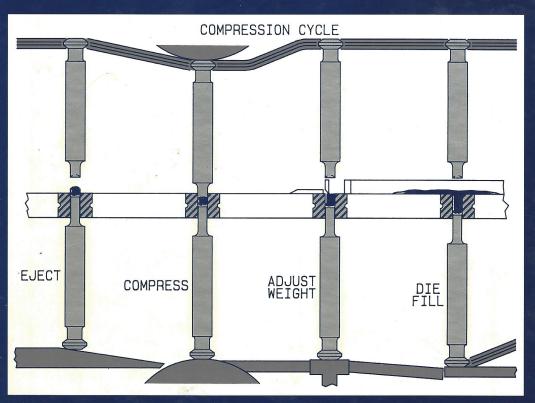
Bandelin, F., Compressed Tablets by Wet Granulation, Pharmaceutical Dosage Forms: Tablets, Vol. 1, 2nd Ed., Herbert Lieberman, et al. eds., Marcel Dekker, Inc., New York (1989) ("Bandelin")



# Pharmaceutical Dosage Forms: Tablets volume 1

Second Edition, Revised and Expanded

Edited by Herbert A. Lieberman, Leon Lachman, and Joseph B. Schwartz





# PHARMACEUTICAL DOSAGE FORMS

# **Tablets**

SECOND EDITION, REVISED AND EXPANDED

In Three Volumes VOLUME 1

**EDITED BY** 

# Herbert A. Lieberman

H.H. Lieberman Associates, Inc. Consultant Services Livingston, New Jersey

## Leon Lachman

Lachman Consultant Services Westbury, New York

# Joseph B. Schwartz

Philadelphia College of Pharmacy and Science Philadelphia, Pennsylvania

MARCEL DEKKER, INC.

New York and Basel



### Library of Congress Cataloging-in-Publication Data

Pharmaceutical dosage forms--tablets / edited by Herbert A. Lieberman, Leon Lachman, Joseph B. Schwartz. -- 2nd ed., rev. and expanded.

p. cm.

Includes index.

ISBN 0-8247-8044-2 (v. 1 : alk. paper)

1. Tablets (Medicine) 2. Drugs--Dosage forms. I. Lieberman,

Herbert A. II. Lachman, Leon. III. Schwartz, Joseph B.

[DNLM: 1. Dosage Forms. 2. Drugs--administration & dosage. QV 785 P535]

RS201.T2P46 1989

for Library of Congress

615'.191--dc19

DNLM/DLC

DLC 89-1629

CIP

Copyright © 1989 by MARCEL DEKKER, INC. All Rights Reserved

Neither this book nor any part may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, microfilming, and recording, or by any information storage and retrieval system, without permission in writing from the publisher.

MARCEL DEKKER, INC.

270 Madison Avenue, New York, New York 10016

Current printing (last digit):

10 9 8 7 6 5 4 3 2 1

PRINTED IN THE UNITED STATES OF AMERICA



# **Contents**

Preface		iii
Contributors		xi
Contents of	Pharmaceutical Dosage Forms: Tablets, Second Edition Volumes 2 and 3	xiii
Contents of	Pharmaceutical Dosage Forms: Parenteral Medications, Volumes 1 and 2	xv
Contonts of	Pharmaceutical Dosage Forms: Disperse Systems,	22.4
Contents of	Volumes 1 and 2	xxx
Chapter 1.	Preformulation Testing	1
_	Deodatt A. Wadke, Abu T. M. Serajuddin, and Harold Jacobson	
	I. Introduction	1
	II. Organoleptic Properties	2
	III. Purity	3
	IV. Particle Size, Shape, and Surface Area	5
	V. Solubility	12 18
	VI. Dissolution	24
	VII. Parameters Affecting Absorption	34
	VIII. Crystal Properties and Polymorphism IX. Stability	42
	X. Miscellaneous Properties	53
	XI. Examples of Preformulation Studies	57
	References	69
Chapter 2.	Tablet Formulation and Design	75
	Garnet E. Peck, George J. Baley, Vincent E. McCurdy, and Gilbert S. Banker	
	I. Introduction	75
	II. Preformulation Studies	77
	III. A Systematic and Modern Approach to	
	Tablet Product Design	79
	IV. Tablet Components and Additives	88
	V. Regulatory Requirements for Excipients in	101
	the United States VI. References	121 128



# DOCKET

# Explore Litigation Insights



Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

# **Real-Time Litigation Alerts**



Keep your litigation team up-to-date with **real-time** alerts and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

# **Advanced Docket Research**



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

# **Analytics At Your Fingertips**



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

# API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

### **LAW FIRMS**

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

### **FINANCIAL INSTITUTIONS**

Litigation and bankruptcy checks for companies and debtors.

# **E-DISCOVERY AND LEGAL VENDORS**

Sync your system to PACER to automate legal marketing.

