Ex. PGS 1039 (EXCERPTED)

DOCKET ALARM Find authenticated court documents without watermarks at <u>docketalarm.com</u>.

COMPUTER-CONTROLLED SYSTEMS

Theory and Design

DOCKET

Δ

Α

R M Find authenticated court documents without watermarks at <u>docketalarm.com</u>.

COMPUTER CONTROLLED SYSTEMS

Theory and Design

Karl J. Åström Björn Wittenmark

Prentice-Hall, Inc., Englewood Cliffs, N.J. 07632



SS

-1

Find authenticated court documents without watermarks at docketalarm.com.

Library of Congress Cataloging in Publication Data

ÅSTRÖM, KARL J. (Karl Johan). (date) Computer controlled systems.

Includes bibliographies and index. 1. Automatic control—Data processing. I. Wittenmark, B. II. Title. TJ213.A78 1984 629.8'95 83-17643 ISBN 0-13-164319-3

Editorial/production supervision and interior design: Karen Skrable Manufacturing buyer: Anthony Caruso

©1984 by Prentice-Hall, Inc., Englewood Cliffs, N.J. 07632

All rights reserved. No part of this book may be reproduced in any form or by any means without permission in writing from the publisher.

Printed in the United States of America

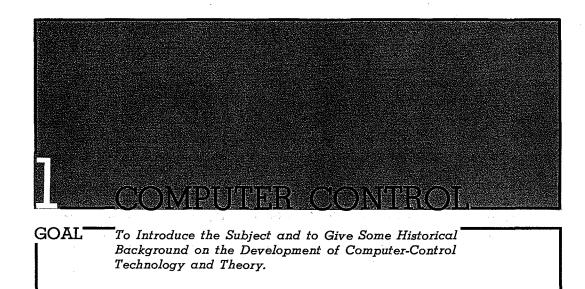
10 9 8 7 6 5 4 3 2

ISBN 0-13-164319-3

DOCKE

Δ

Prentice-Hall International, Inc., London Prentice-Hall of Australia Pty. Limited, Sydney Editora Prentice-Hall do Brasil, Ltda., Rio de Janeiro Prentice-Hall Canada Inc., Toronto Prentice-Hall of India Private Limited, New Delhi Prentice-Hall of Japan, Inc., Tokyo Prentice-Hall of Southeast Asia Pte. Ltd., Singapore Whitehall Books Limited, Wellington, New Zealand



1.1 Introduction

Digital computers are increasingly being used to implement control systems. It is therefore important to understand computer-controlled systems well. One can view computer-controlled systems as approximations of analog-control systems, but this is a poor approach because the full potential of computer control is not used. At best the results are only as good as those obtained with analog control. Alternatively, one can learn about computer-controlled systems, so that the full potential of computer control is used. The main goal of this book is to provide the required background.

A computer-controlled system can be schematically described as in Fig. 1.1. The

Find authenticated court documents without watermarks at <u>docketalarm.com</u>.

1

DOCKET A L A R M



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.