



Edition: 1st Edition 2006

pages: 330 Images: 856

Cover: Hardcover

ISBN: 978-1-85097-127-6

Stock No.: 13621 Published: July 2006

## **Quintessenz Verlags-GmbH**

- ▼ Ifenpfad 2-4 12107 Berlin Germany
- **3** +49 (0) 30 / 76180-5
- **H** +49 (0) 30 / 76180-680
- http://nginx/deu/de

# **Book information**

**Editor:** Tuncay, Orhan C.

Title: The Invisalign System

#### **Short text:**

This book, the first to be published on the Invisalign System, provides the reader with an in-depth look at the technology, performance, and clinical applications of this uniquely esthetic and patient-friendly approach to orthodontic treatment. Unlike conventional fixed orthodontic treatment approaches, Invisalign is a system that uses the clinician's diagnostic data to create a three-dimensional image of the desired course of tooth movement; treatment is then carried out using a series of custommanufactured removable, clear plastic aligners. Full-color images illustrate every step of this process: from impression taking, image acquisition, and virtual diagnosis through digital three-dimensional treatment planning. Clinical considerations, such as indications and contraindications, esthetic analysis, and treatment of adolescents, are also discussed. In addition, the technology behind the Invisalign System - including software, appliance design, manufacturing, material properties, biomechanics of force systems applied to the teeth, and periodontal response to treatment - is presented in the context of how it currently functions as well as research and development for future innovations. Excellent for clinicians who want to learn more about how the Invisalign System can be integrated into their practice.

#### **Contents**

Section I. History of the Concept

Chapter 01. The Dental Contour Appliance: A Historical Review Chapter 02. Essix Technology: Tooth Movement and Retention Chapter 03. History and Overview of the Invisalign System

Section II. Modeling in the Invisalign System

Chapter 04. Polyvinyl Siloxane Impression Materials Chapter 05. Align's Standard on Quality Impressions Chapter 06. Scanning Process and Stereolithography

Chapter 07. Invisalign Software Chapter 08. Virtual Diagnostic Setup

Chapter 09. Attachments

Chapter 10. Invisalign Attachments: Materials Chapter 11. ClinCheck: Overview and Preparation

Chapter 12. Staging

Chapter 13. Overcorrection: Principles and Considerations Chapter 14. Three-Dimensional Superimposition Tool

Chapter 15. Virtual Invisalign Practice

Chapter 16. Computer-Oriented Dental Measurements

Section III. Performance Characteristics of the Invisalign System

Chapter 17. Mechanics of Tooth Movement with Invisalign

Chapter 18. Applications of Mechanics with Invisalign

Chapter 19. Biologic Elements of Tooth Movement

Chapter 20. Properties of Aligner Material Ex30

Chapter 21. Ex40 Material and Aligner Thickness

Chapter 22. Extraction Treatment with Invisalign

Chapter 23. Force Application with Invisalign: Constancy and Compliance

Section IV. Clinical Considerations in Using the Invisalign System

Chapter 24. Advantages of the Invisalign System

Chapter 25. Review of the Diagnostic Process

Chapter 26. Interproximal Enamel Reduction

Chapter 27. Facial Esthetic Examination and Analysis

Chapter 28. Surgical Treatment and Invisalign

Chapter 29. Feasibility Study of the Invisalign System in Treatment of Adolescents

Chapter 30. Data Mining: Principles and Considerations

Section V. Office Design and Technology Chapter 31. Invisalign Office Design and Technology

### **Contributors**

Marc B. Ackerman • Andrew Beers • Robert L. Boyd • Heng Cao • Jihua Cheng • David Chenin • Craig Crawford • Mitra G. Derakhshan • Trang Duong • Robert Fry • Paul-Georg Jost-Brinkmann • Agnes A. Kan • Srinivas Kaza • Peter Knopp • Eric Kuo • Marc S. Lemchen • Chunha Li • Vadim Matov • Rainer-Reginald Miethke • Ross Miller • Henry I. Nahoum • C. Van Nguyen • David E. Paquette • John M. Powers • John Sheridan • Rene Sterental • Robert Tricca • Andrew Trosien • Orhan C. Tuncay • Kent Verdis

Categories: Orthodontics