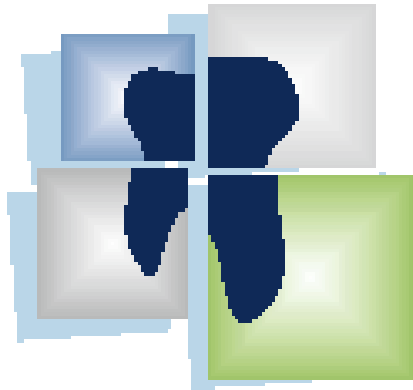




**Real Dental Medikal Ltd. Şti.**



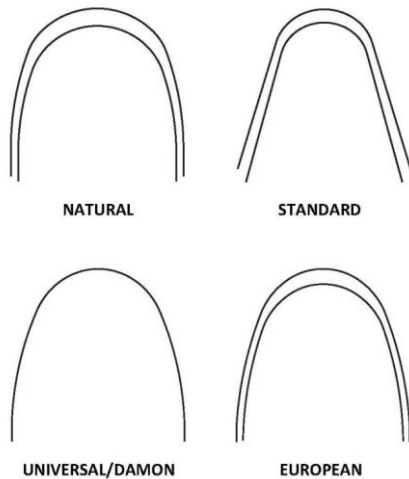
**Real Dental**

# Problem?

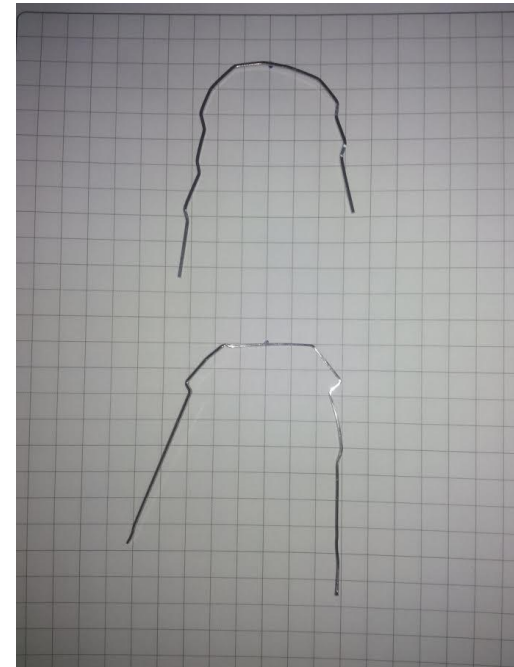
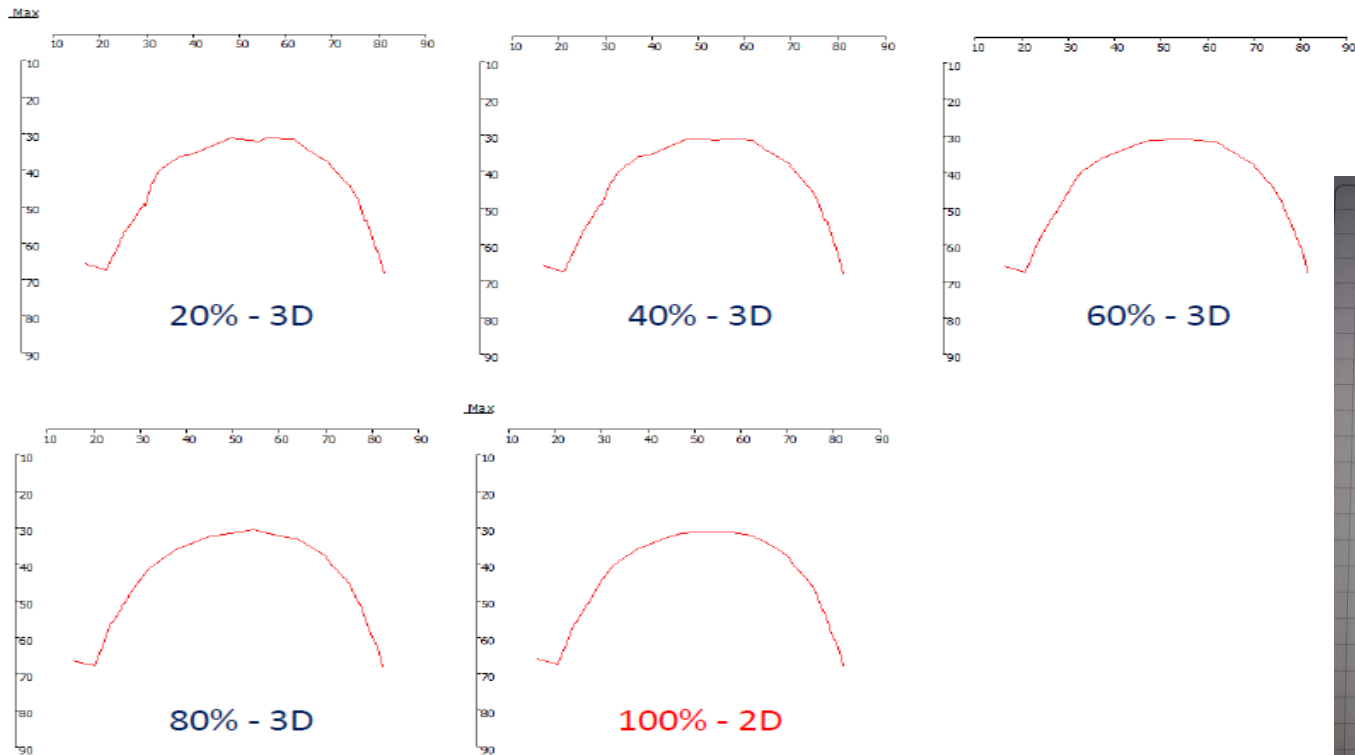
- No Surprises!!! Displaying results before treatment (Cad-Cam technology)
- Reducing length of treatment by 30-50%
- Short clinic exams (since all archwires are delivered as bended) and less time spent with patient
- Aesthetic Orthodontics Concept: Orthodontic Treatment Without Braces or Lingual Orthodontics
- Remote Orthodontics Concept

## Current State of Classic Orthodontics

- Custom wire bending manually done by orthodontist/dentist, not precise and predictable treatment.
- Standardized wires.



## Solution: Automation on Orthodontics



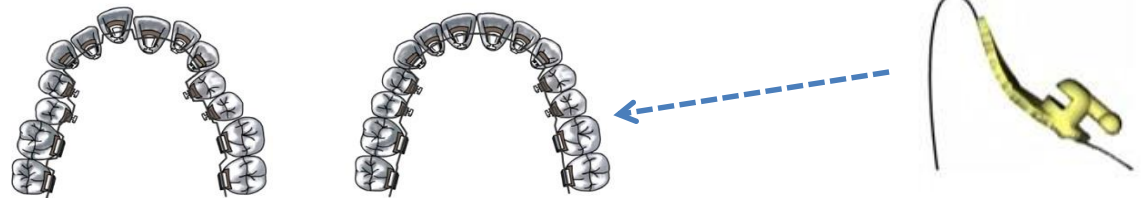
# Current State of Lingual Orthodontics

There are two different systems: bended wire (thin brace ) and straight wire (thick brace).

Manuel bending operations can not form complex angles as precisely as target archwire.

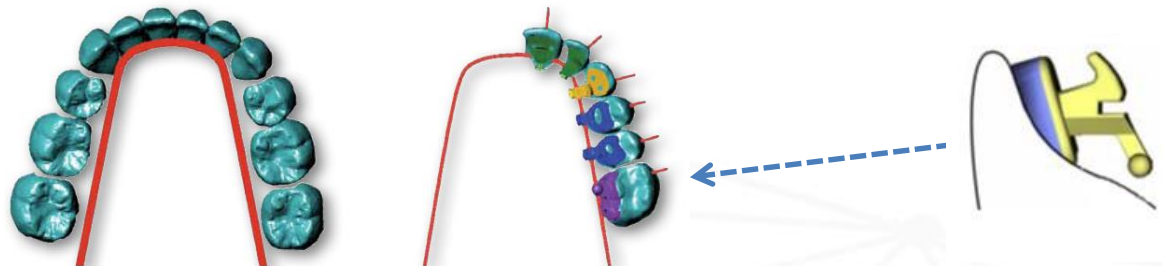
## Robotic Bending

Thin braces = comfortable



## Manuel Bending

Thick braces = much less comfortable



## Current State of Aesthetic Orthodontics







# IP Strategy

## National Application

App. Number 2015/17424

“KİŞİSELLEŞTİRİLMİŞ ARK TELİ  
ŞEKİLLENDİRME YÖNTEMİ VE BU  
YÖNTEME UYGUN GELİŞTİRİLMİŞ  
BRAKET TRANSFER APARATI”

## PCT Application

Preparing  
documents for the  
official application

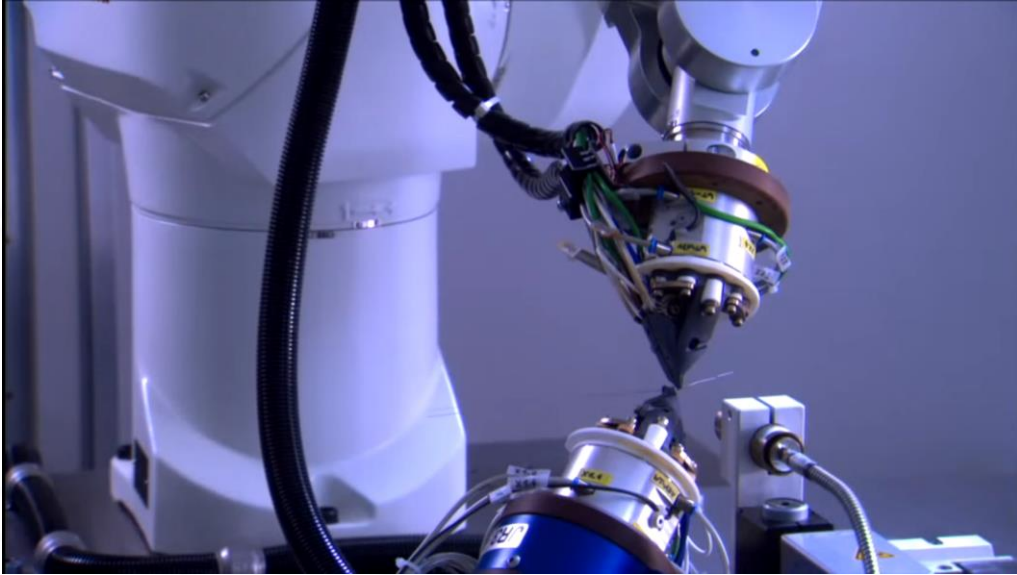


# Market

- %74 of the people (6 B) need orthodontic treatment all over world.
- 15 M annual worldwide case starts – (2.6 M Adult)
- ~12% market expending in TR, Annualy
- ~130K patient-(32 K Adult)
- Turkish Orthodontic Supplies Market: 8 M \$



## COMPETITORS



- Orametrix
- American Company
- Established at 2001
- Wire bending service for treatments
- Price: 800-2500 \$

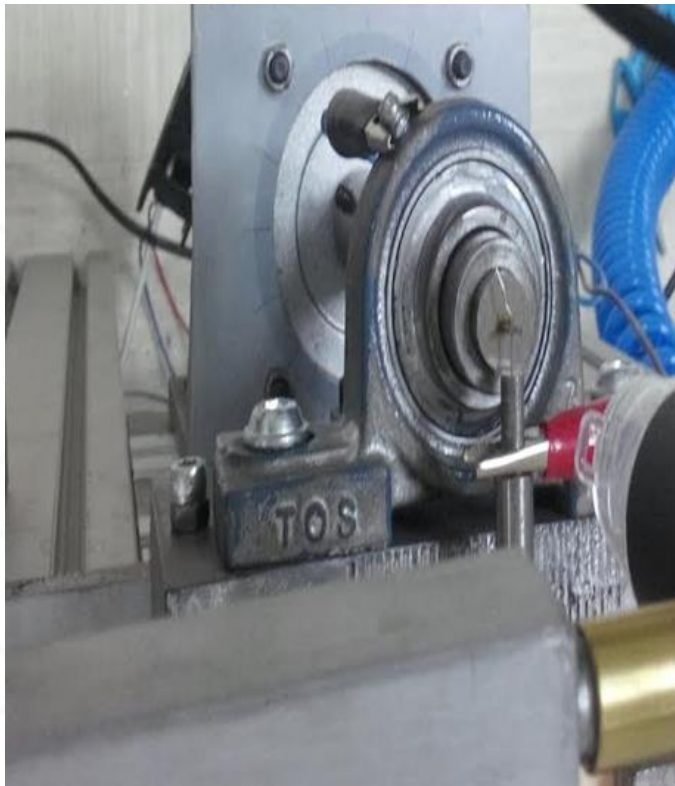
Comparisons	3M-İncognito Top Service Lab Germany	Orapix South Korea	American Orthodontics Harmony-USA	Real Dental
<b>Bracket</b>	Digital Custom Made	Mass Manufacturing	Digital Custom made	Digital Mass Custom Made
<b>Metallotechnis</b>	Casting	İnjected	Casting	İnjected
<b>Pad Material</b>	Metal(Gold alloy)	Composite(resin)	Stainless Alloy	Composite (Resin)
<b>Set-Up</b>	Digital	Digital	Digital	Digital
<b>Arch from/Shape</b>	Robotically formed	Straight wire-No bends	Robotically formed	Robotically formed
<b>Wire sequence</b>	Limited-depends on provider	Free	Limited-depends on provider	Free
<b>Wire Bending</b>	Done by Robot	Pre-formed straight arch wire	Done by Robot	Done by Robot
<b>Bonding</b>	Transfer Tray	CAD/CAM jigs or Transfer Tray	Transfer Tray	CAD/CAM jigs or Transfer Tray
<b>Rebonding</b>	Direct Method	Refix into the jig	Direct Method	Refix into the jig
<b>Debonding</b>	Single İnterface	Multiple interface	Single İnterface	Multiple interface
<b>Cost</b>	2500 -3000 Eu	1200 Eu + 300-500 Eu Braces	2000-2500 Eu	1000-1200 Eu +300-500 Eu Braces
<b>Brand</b>	Global Company	Global Company	Global Organization	Created at 2014



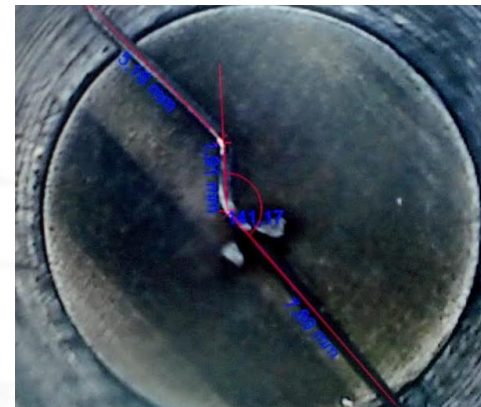
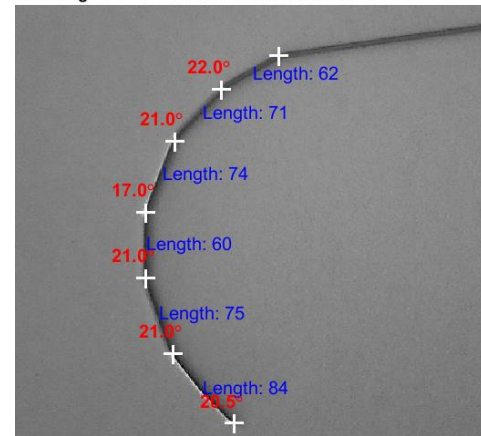
# COMPETITORS

- Sure Smile-USA (Robotic bending both classic and invisible orthodontics); Cloud based service and doctors self guided set-ups and orders robotic bended archwires from the company.
- Ebrace: Chinese manufacturing company with straight arch wire (thick brace) system.
- There are just a few companies around the world which service robotic bended archwires . We will be one of them at soon.

# Currently...



Original with Detected Lines Overlaid



# Taking Digital Impression...



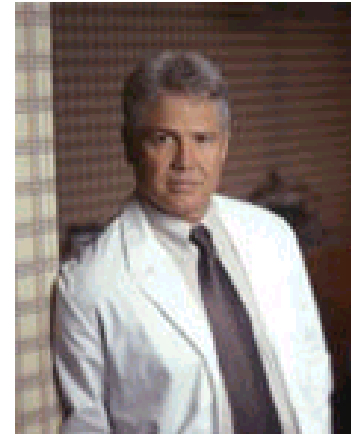
Intra Oral Scanner



## RISK+BARRIERS=SAFETY

Barriers:

- 1) There is no ready Cad-Cam programs and there is no arcwire bending machine at the market.
- 2) Patent applications.







## POTENTIAL CUSTOMERS

- Orthodontists
- Dentists
- Dental Clinics
- Dental Hospitals
- Dental & Orthodontic Universities



## ABOUT REAL DENTAL

- Research and Development began in 2012.
- \$50,000 venture capital from Turkish Science and Technology Ministry (cad-cam based lingual orthodontics treatment approach; April 2014).
- 2 patents pending.
- Technological validation of archwire bending robot will be secured June, 2017.



## OUR TEAM



Mechanical-Automotive Engineer  
A.Arslan Nazan



Orthodontist  
Dr. Muhammed Almagrabi

Project Consultant



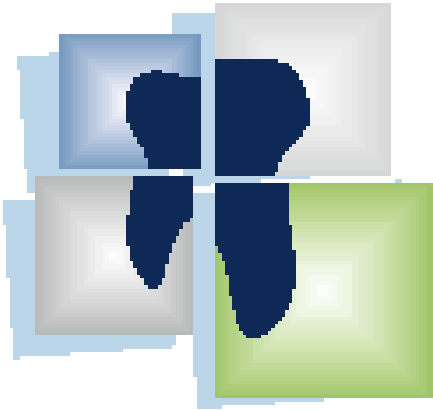
Mechanical Engineer  
Sinan Demir



Dental Technician  
Hüseyin Öztürk



**Teşekkürler...**



**Real Dental**