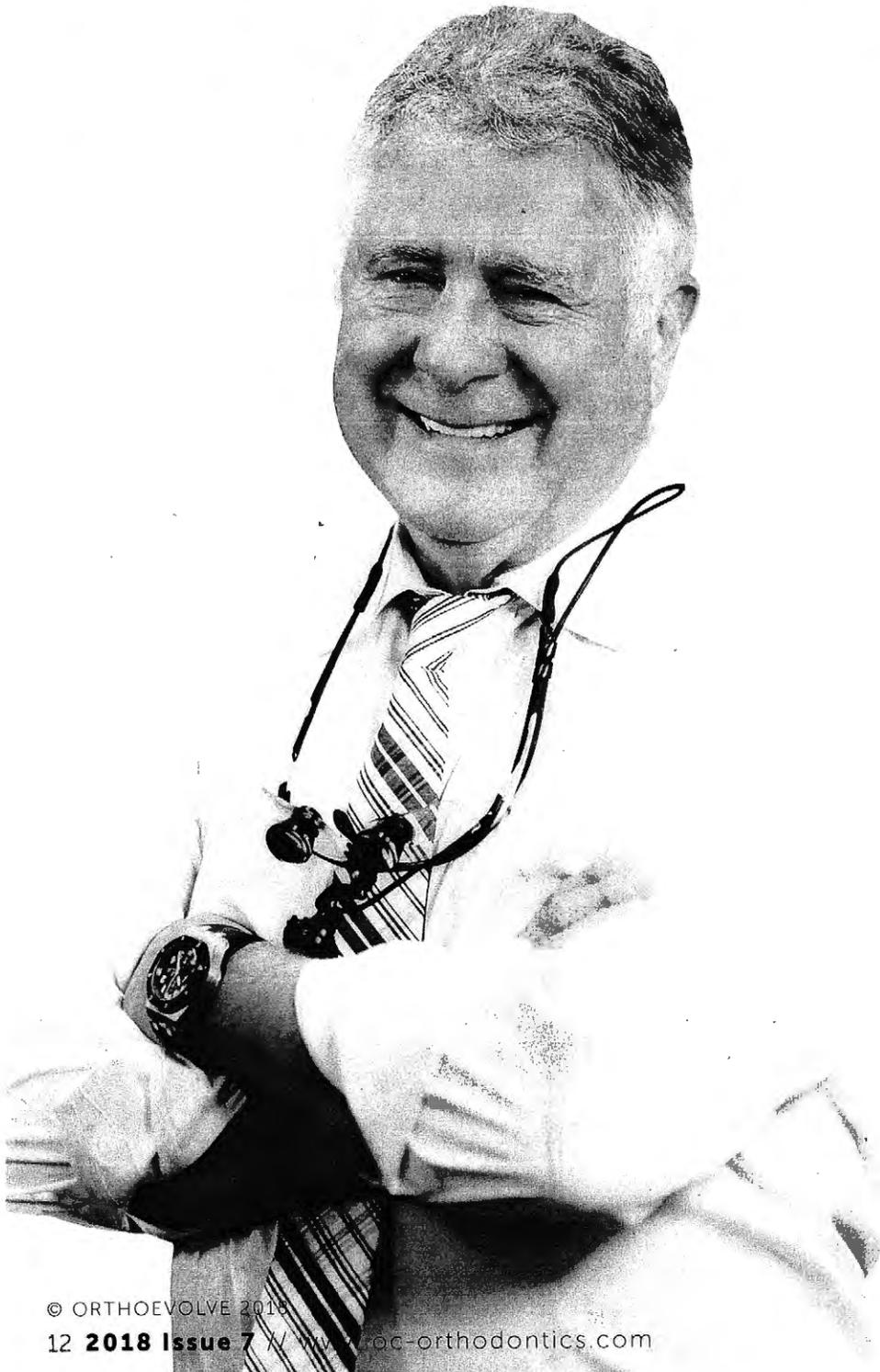


# YOU CAN HAVE IT ALL

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**F**ixed orthodontic appliances have slowly been losing market share throughout the world as aligner treatment has become more sophisticated. Marketing pressures from aligner giants have intensified and primary care dentists are aggressively providing “orthodontic treatment” in their offices. At the same time, mainstream orthodontics has not been progressive enough in either their fixed appliances techniques, or their ability to provide esthetic results “beyond straight teeth”.

Many years ago I selected the passive self-ligating (PSL) mechanism as my fixed appliance of choice as it has helped many of us treat difficult malocclusions more easily with less extractions, less surgery, while developing stunning smile esthetics. However, for many users, it has taken too much time to finish due to loose fit of the wire in the passive slot, especially in the anterior teeth. The commonly applied clinical PSL approach was limited to increasing the arch wire size in a rectangular slot, which was inefficient, and increased applied forces to levels that were too much force for my liking.

# “Creativity is seeing what others see and thinking what no one else has thought” - Einstein

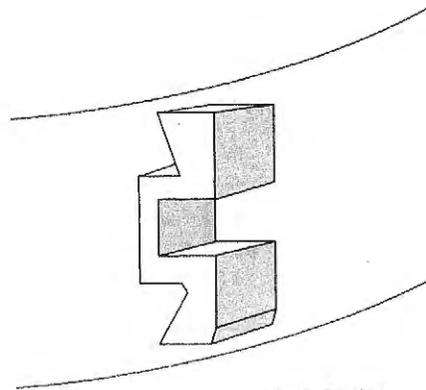
## What do Patients really want?

Dr. Jerry Watanabe spoke with me years ago about the notion that the general public believes Orthodontists or Practitioners doing orthodontics only “straighten teeth”. If we can deliver a superior cosmetic smile and outstanding improved facial esthetics, validated by excellent photos and videos of other patients, the patients will always choose “WOW” smiles (*great phrase created by Dr. Nimet Guiga*) and facial esthetics. They immediately appreciate the difference between straight teeth and appealing esthetics. The common response is, “You can do that? Can you do it quickly?”

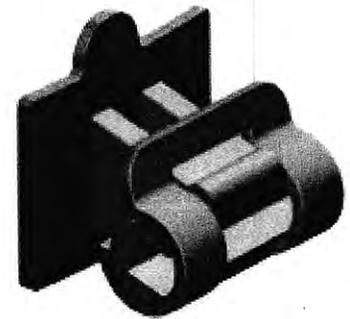
## It is time to rethink our role and save the specialty!

Over the last several years it became obvious to me that orthodontic thought needed a “reset”. Early on I tried .018 slotted appliances and square wires, which provided very satisfying torsional control with light forces, but was disappointing due to insufficient leveling forces and inadequate rotational control. Some years ago, I began testing .020 x .020 square NiTi and Beta Titanium wires in a .022 x .028 appliance. Both torsional control and leveling were excellent, but of course rotational control was lacking. I began thinking of the potential benefits of reduced buccal lingual slot depth to improve rotational control.

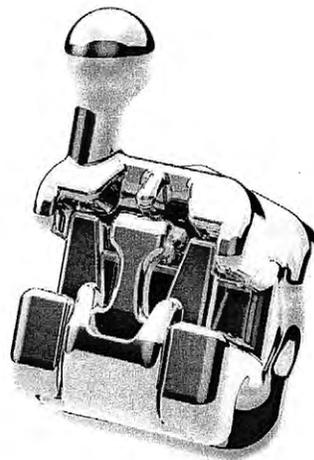
At the same time, we introduced “Active Early” case management strategies that went a long way to mitigate the challenges imposed by rigid adherence<sup>1</sup> to “straight wire theory” (which has dominated our profession since Larry Andrews’ breakthrough article<sup>2</sup> in the 1970’s), and the limitations of rectangular slotted appliances in a PSL system.



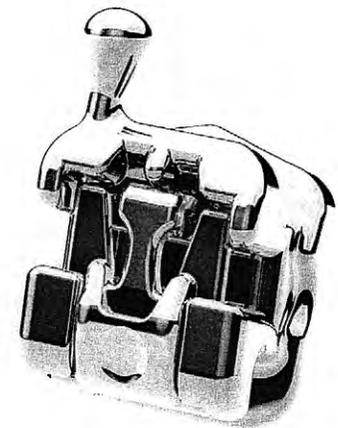
Angle Bracket



Activa Bracket



H4 Bracket



Pitts 21 Bracket

Figure 1: Amazing changes in bracket technology.