applicant's subjective belief that his employment may have contributed to an injury is insufficient to satisfy the knowledge requirement of section 5412.

Applicant testified that he sustained a multitude of injuries over the course of his professional football career. Applicant testified that as a Quarterback, he was "sacked" 83 times. (Transcript of Proceedings, dated August 15, 2017, at 21:9.) Applicant further testified he sustained approximately 70-80 injuries to various parts of his body, including sprains and contusions to his bilateral knees, right finger, left ankle, right rib, left shoulder, and chest. (*Id*. at 33:14; see also Ex. 3, Report of Michael Einbund, M.D., dated March 20, 2014, pp. 11-16.) Applicant further underwent four surgeries to his bilateral knees. (Transcript of Proceedings, dated August 15, 2017, at 33:20.) Applicant's description is that of a long series of traumas, only recognized as a cumulative injury with the benefit of legal, and later, medical, advice. Dr. Einbund's report of March 20, 2014 reviewed applicant's history of various injuries and concluded:

> Professional football is an extremely violent occupation. In addition to the specific injuries to his knees as outlined above, Mr. Penrose has reported that he sustained numerous other injuries throughout his career as he played in games, practiced and worked out. He has indicated that he would receive treatment from the team trainers and that he would occasionally miss some playing time; however, he was always able to return to playing without any limitations. As long as he was engaged in these activities, his entire body was continuously subjected to severe traumatic forces, all of which are part and parcel to his current condition. (Ex. 3, Report of Michael Einbund, M.D., dated March 20, 2014, p. 24.)

Dr. Einbund thus provides a medical opinion identifying an overarching cumulative trauma arising out of applicant's extensive and multifactorial history of microtrauma over the course of his career in professional football.

Defendant avers that applicant's experience in insurance sales, including the sale of California workers' compensation policies, supports a finding that applicant should have recognized the relationship between the known adverse factors involved in his employment and his disability. (Petition, at 21:23.) However, applicant testified that while he sold workers' compensation policies, he received no special training regarding cumulative trauma claims. (Transcript of Proceedings, dated October 11, 2017, at 76:11.) Moreover, the record does not establish how applicant's experience in insurance sales would qualify him to reach a medical determination that he had sustained a cumulative trauma injury arising out of industrial exposures while playing professional football.

The first documentary medical evidence in the record that identifies a cumulative trauma injury is the 2014 reporting of applicant's QMEs. (Ex. 3, Report of Michael Einbund, M.D., dated March 20, 2014; Ex. 8, Report of Kenneth Nudleman, M.D., dated March 19, 2014.) However, applicant has testified that when he met with his

attorney in 2011, he learned of his right to seek workers' compensation benefits in California, and caused a cumulative trauma claim to be filed. (Transcript of Proceedings, dated October 11, 2017, at 78:1.) In subsequent pleadings and sworn testimony, applicant has consistently described 2011 as the first time he learned of his right to file a cumulative trauma claim. (Applicant's Petition for Reconsideration to Clarify an Issue Submitted for Determination, dated April 23, 2018, at 2:11; Supplemental Minutes of Hearing, dated September 26, 2018, at 4:6.) Accordingly, we conclude that applicant's first date of knowledge for purposes of section 5412 is the date he met with his attorney and caused his application to be filed, June 21, 2011. (Application for Adjudication, dated June 21, 2011; *Bassett McGregor v. Workers' Comp. Appeals Bd.* (1988) 205 Cal.App.3d 1102, 1109-1110 [53 Cal.Comp.Cases 502].)

The first date of compensable disability identified in the record was March 20, 2014. The first date applicant was advised of the possible existence of a cumulative trauma injury arising of his professional football activities was June 21, 2011. Accordingly, we give notice of our intention to find that the date of injury under section 5412 was the date of concurrence of knowledge and disability on March 20, 2014.

(Notice of Intention to Submit for Decision, January 20, 2023, at pp. 16-20.)

For the reasons set forth above, we conclude that the date of injury pursuant to section 5412 is March 20, 2014.

III.

Next, we address the Permanent and Stationary date. Our January 20, 2023 NIT provided the parties with notice of our intention to find that applicant became permanent and stationary on March 20, 2014. Therein we wrote:

The WCJ has previously determined that applicant became permanent and stationary on December 31, 1986, based on the findings of Dr. Nudleman, who opined that applicant reached a permanent and stationary status one year after the end of applicant's professional football career. (March 20, 2018 F&A, Findings of Fact No. 5; Opinion on Decision, at p. 11.) We affirmed this determination in our June 12, 2018 Opinion and Order. (Opinion and Order Granting Petitions for Reconsideration, dated June 12, 2018, at 15:10.)

The WCJ's April 12, 2019 supplemental findings of fact determined the section 5412 date of injury to be in 2014, but also determined that "[b]ased on the prior Findings and Award dated March 20, 2018, which was affirmed on appeal, applicant's condition became permanent and stationary on December 31, 1986."

(April 12, 2019 F&A, Findings of Fact No. 6.) Defendant's Petition contends that it was error to award indemnity payable at 2014 rates, retroactive to applicant's permanent and stationary date in 1986. (Petition, at 17:3.) The WCJ's report responds that, "[t]his Court could not utilize the March 2014 permanent and stationary date as set forth in the deposition of Dr. Einbund at the second trial insofar as the Appeals Board had affirmed on appeal the permanent and stationary date of December 31, 1986. In light of the new finding pursuant to LC 5412 of a date of injury in 2014 this Court would recommend that the prior permanent and stationary date be vacated pursuant to LC 5803." (Report, at p. 7.)

Any award, order or decision of the WCAB must be supported by substantial evidence. (Lab. Code, § 5952(d); *Lamb v. Workmen's Comp. Appeals Bd.* (1974) 11 Cal.3d 274 [39 Cal.Comp.Cases 310]; *Garza v. Workmen's Comp. Appeals Bd.* (1970) 3 Cal.3d 312, 317 [35 Cal.Comp.Cases 500].) In order to constitute substantial evidence, a medical opinion must set forth the reasoning behind the physician's opinion, not merely his or her conclusions; a mere legal conclusion does not furnish a basis for a finding. (*Granado v. Workers' Comp. Appeals Bd.* (1970) 69 Cal.2d 399, [33 Cal.Comp.Cases 647]; *McAllister v. Workmen's Comp. Appeals Bd.* (1968) 69 Cal.2d 408, [33 Cal.Comp.Cases 660]; *Escobedo v. Marshalls* (2005) 70 Cal.Comp.Cases 604 (Appeals Board en banc).)

The inherent difficulties in reaching competent medical conclusions with respect to applicant's medical status more than 25 years after his last football game are evident in the medical-legal reporting herein. Dr. Nudleman's initial report concludes that "[n]eurologically, [applicant] is permanent and stationary, and he became permanent and stationary one year after completing his professional football career." (Ex. 8, Report of Kenneth Nudleman, M.D., dated March 19, 2014, at p. 3.) However, the report fails to disclose any reasoning behind this conclusion. The report does not reflect a review of contemporaneous medical records from 1985 or 1986, and we find the retroactive assessment of a permanent and stationary status more than 30 years prior to be inherently speculative and otherwise unsupported in the record.

Similarly, orthopedic QME Dr. Einbund opined that applicant's condition became permanent and stationary "approximately two to three months following his retirement from professional football." (Ex. 3, Report of Michael Einbund, M.D., dated March 20, 2014, at p. 18.) Dr. Einbund's initial record review encompassed records from 1976 to 1981, and the report does not disclose the basis for the assessment that applicant reached a permanent and stationary plateau shortly after he stopped playing professional football in 1985. An expert opinion is insufficient to support a board determination when that opinion is based on surmise, speculation, conjecture, or guess. (*Owings v. Industrial Acc. Com.* (1948) 31 Cal.2d 689, 692 [192 P.2d 1]; *Spillane v. Workmen's Comp. App. Bd.* (1969) 269 Cal.App.2d 346, 351 [74 Cal.Rptr. 671]; *Industrial Indem. Co. v. Industrial Acc. Com.* (1949) 90 Cal.App.2d 262, 265-266 [202 P.2d 585]; see *Garza, supra,* 3 Cal.3d 312, 317.)

In subsequent deposition testimony, Dr. Einbund was candid regarding the difficulties in reaching a medical opinion on the issue:

> Q. So, my -- part of the definition of both MMI and P and S status is that the condition is well stabilized and unlikely to change substantially in the next year with or without medical treatment; correct?
> A. Correct.
> Q. Within a reasonable degree of medical certainty, when do you believe that the level of disability that you found in your initial report would have supported a MMI or permanent and stationary date?
> A. Well my job when I see somebody who played years ago is to give the best estimate when he became permanent and stationary. And typically I say shortly after retirement. Sometimes I say three months, sometimes I say four months. I just do the best I can do with the information. There's no question the degeneration if I would have seen him 20, 30 years ago would be less. But the degeneration when I saw him in 2014 was a result, in my opinion, of his professional football career.
> Q. Correct. So, I'm asking you already indicated in your earlier testimony that a month after his career, he didn't have the level of disability that you described in your report; correct?
> A. That's highly probable.
> Q. I would assume that the level of disability increased over the years as a result of both his osteoarthritic condition and the injurious exposure from football; correct?
> A. Yes.
> Q. When do you believe that ripened into the level of disability that you found to exist in your initial report of March 20th, 2014?
> A. Can't answer that. X number of years later. I mean maybe five, maybe ten, maybe fifteen. I don't know how unless I saw him. So, let me answer. Let's hypothetically I saw him in 2004. I would just be guessing how bad his disability was. Let me try to refresh when the knee replacement was done. That was '07. So, for sure by '07 he had severe degeneration on that left knee. But I can't. I don't know when he had a one millimeter joint space on the right knee. I just don't know.
> Q. So, is it fair to say without additional evidence, that without speculating you can't determine his P and S date or MMI date to be before the date you evaluated him?
> A. I just do the best I can do. Because I'm obligated to give a date.

* * * * *

Q. I'm giving you the definition of permanent and stationary and MMI status and it specifically references the fact that the condition is well stabilized and unlikely to change substantially in the next year or two. Would [sic] that being said, you've-already indicated that his condition regarding disability got worse over the years; correct.
A. True. In that case assuming what you gave me is accurate, then he probably was not permanent and stationary shortly after his career. But sometime down the line and I can't give an exact date.
Q. But you can give within a reasonable degree of medical certainty you can say that he was P and S'd at least as of the date you evaluated him; correct?
A. There's no question he was P and S when I saw him.

(Ex. 2, Transcript of the Deposition of Michael Einbund, M.D., at 18:9; 21:22.)

Following our review of the record, and in the absence of contemporaneous medical records, we believe the retroactive assessment in 2014 that applicant reached a permanent and stationary status in 1986 is inherently speculative. To constitute substantial evidence, "a medical opinion must be framed in terms of reasonable medical probability, it must not be speculative, it must be based on pertinent facts and on an adequate examination and history, and it must set forth reasoning in support of its conclusions." (*Escobedo, supra,* 70 Cal.Comp.Cases 604, 621.) However, after reviewing the criteria for a Permanent and Stationary determination, Dr. Einbund opined that there was "no question," that applicant was permanent and stationary as of his evaluation date on March 20, 2014. (Ex. 2, Transcript of the Deposition of Michael Einbund, M.D., at 21:22.) Accordingly, we are persuaded that March 20, 2014 is the first date in the record that identifies applicant's permanent and stationary status to a reasonable degree of medical probability.

We therefore concur with the recommendation made by the WCJ in her Report, and we give notice of our intention to enter a new finding of fact that applicant reached a permanent and stationary status as of March 20, 2014.

(Notice of Intention to Submit for Decision, January 20, 2023, at pp. 20-23.)

Applicant's Response to our NIT avers the deposition testimony of Dr. Einbund does not constitute substantial medical evidence. (Applicant's Response, at p. 9:8.) Applicant points out that in Dr. Einbund's own words his assessment that applicant became permanent and stationary several months after he left professional sports was arbitrary. (Ex. 2, Transcript of the Deposition of Michael Einbund, M.D., at p. 21:16-19.)